Gram Panchayat Development Plan

Within the Framework of Jal Jeevan Mission

DRAFT

GPDP Operational Guidebook
For Jal Jeevan Mission (JJM)

Centre for Rural Infrastructure

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Guidebook
GPDP Operational Guidebook for Rural Water Supply Engineers

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Foreword

Jeevan Mission is a very ambitious programme that aims at providing piped water supply at every door step to all the 180 million rural households by 2024. Talking from the perspective of Jal Jeevan Mission (JJM), Swachh Bharat Mission-G 2.0 (SBM-G) and the recommendations of the XV Finance Commission, the years 2020-2024 is the most opportune years for Gram Panchayats in India to achieve sustainable water and sanitation for all. The scope provided for 'convergence of funds' from various other schemes such as MGNREGS, PMKVY, DDU-GKY for achieving the goal of JJMand SBM-Gonly further reassures our hope of accomplishing not only 100% Functional House Tap Connections (FHTCs) to all the rural households by 2024, but also of realising the SDG-6 on Water and Sanitation, much before 2030.

Jal Jeevan Mission encourages going through a participatory process in fulfilling the drinking water requirements of rural communities. This, in other words, means decentralised planning in action. The Ministry of Panchayati Raj (MoPR) has a generic guideline for preparing Gram Panchayat Development Plans (GPDP). Operationalising JJM,taking cues from the GPDP Guidelines enhances the prospects of democracy in practice at the grassroots level.

I understand that this guidebook has blended the essential elements of JJM with the planning mechanism suggested by GPDP Guidelines. I am confident this will be of great use to the water supply engineers working at the Department of Rural Water Supply (RWS) or at the Public Health Engineering Department (PHED).

Alka Upadhyaya I A S
Director General

August, 2020
NIRD&PR, Hyderabad

Preface

The erstwhile NRDWP and other earlier sub-missions on rural drinking water supply have been subsumed into Jal Jeevan Mission (JJM). The Government of India's policy of progressive decentralization at the grassroots level entails Gram Panchayats to come out with Gram Panchayat Development Plans (GPDP) every year. Rural water supply plan shall be a sub-plan of the overall GPDP. Therefore, it requires those working for the Jal Jeevan Mission (JJM) to be familiar with the GPDP guidelines.

JJM makes constant reference to Gram Panchayat, Gram Sabha, Panchayat level planning, and village level water and sanitation committee etc. But it does not explain the process JJM shall take to prepare a water supply sub-plan within the framework of GPDP. JJM guideline is a 132-page document. The GPDP guideline is a 178 page document. Thus, if one desired to have a grip over these two guidelines before getting down to facilitating a GPDP exercise for JJM at the Gram Panachayat level, one has to read 310 pages.

The document you have in hand offers a subtle blend of JJM and GPDP guidelines describing the steps involved in preparing a water sector specific sub-plan that must get incorporated into an overall GPDP. It does not cover sanitation related aspects, for they are covered in another guidebook. GPDP is to be prepared through a participatory process involving an array of stakeholders. This planning exercise involves certain logical and decisive steps leading to culmination of a Village Action Plan (VAP) for water supply, which we call Drinking Water Sector Sub-plan under GPDP.

This guidebook shows the steps you need to take in order to prepare a drinking water supply sub-plan for a GP following the process suggested by the GPDP guidelines. The purpose is to give only the essential reading, and the suggestive steps. Those actually involved in this exercise are free to use their ingenuity to improvise and adapt.

Dr R Ramesh
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August, 2020

Abbreviations

AAP	Annual Action Plan
BCC	Behavior Change Communication
CBO	Community Based Organization
CSO	Civil Society Organization
CWPP	Community Water Purification Plant
DDWS	Department Of Drinking Water and Sanitation
DIY	Do it Yourself
DPR	Detailed Project Report
DWSM	District Water and Sanitation Mission
ESR	Elevated Storage Reservoir
FC	Fully Covered
FHTC	Functional Household Tap Connection
FTK	Field Test Kit
GOI	Government of India
GIS	Geographic Information System
GP	Gram Panchayat
GPPFT	Gram Panchayat Plan Facilitating Team
HRD	Human Resource Development
HR	Human Resources
IEC	Information, Education and Communication
ISA	Implementation Support Agency
JJM	Jal Jeevan Mission
LPCD	Litres Per Capita Per Day
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MNRE	Ministry of New and renewable Energy
MPLADS	Members of Parliament Local Area Development Scheme
MLALADS	Member of Legislative Assembly Local Area Development Scheme

MoPR	Ministry of Panchayati Raj
MoRD	Ministry of Rural Development
MVS	Multi Village Scheme
NE	North East
NGO	Non-Governmental Organization
NJJM	National Jal Jeevan Mission
NRDWP	National Rural Drinking Water Programme
O & M	Operation and Maintenance
PMKVK	Pradhan Mantri Kausal Vikas Kendra
PFMS	Public Financial Management System
PHED	Public Health Engineering Department
PPP	Public Private Partnership
PPR	Preliminary Project Report
PRA	Participatory Rural Appraisal
PRI	Panchayati Raj Institutions
Q&Q	Quality and Quantity
R&D	Research and Development
RWH	Rain Water Harvesting
RWS	Rural Water Supply
SBM(G)	Swachh Bharat Mission (Grameen)
SDG	Sustainable Development Goals
SHG	Self Help Group
SVS	Single Village Scheme
SWSM	State Water and Sanitation Mission
ToT	Training of Trainers
VAP	Village Action Plan
VWSC	Village Water and Sanitation Committee
WQM&S	Water Quality Monitoring& Surveillance

Chapter – 1

Introduction to JJM & GPDP

Prelude

This document opens with a crisp summary of Jal Jeevan Mission (JJM) guidelines, and relatable portions from the XV-FC for rural local bodies. The idea is to highlight the salient points from the JJM guidelines and the XV-FC, before we embark on the actual planning (GPDP) exercise. Knowledge of JJM guidelines and the XV-FC recommendations for rural local bodies is essential to be able to come out with a Village Action Plan (VAP) on rural water supply for Gram Panchayats. Therefore, for somebody who has not had an opportunity to read JJM guidelines, or the XV-FC recommendations on fund allocation to rural local bodies (Gram Panchayats), part I, and II will be of value. If you are familiar with JJM guidelines, and XV-FC recommendations you can choose to skip part I & II of Chapter - I, and move on to part III.

Jal Jeevan Mission (JJM)

Gram Panchayats (GPs) have a constitutional mandate to supply and manage drinking water to the rural households in India. The Ministry of Jal Shakthi of the Government of India has come out with an ambitious plan of providing Functional Household Tap Connection (FHTC) to every rural family in this country by 2024. This also includes providing functional tap connection to schools, *anganwadi* centres, GP buildings, health centres, SHG buildings and other community buildings in rural areas. This ambitious plan is known as 'Jal Jeevan Mission'. It has several other elements such as measures to augment and protect water sources, and management of wastewater etc.

It is envisaged under JJM that the community will play a led role in planning, implementation, management, operation and maintenance of in-village water supply infrastructure. Therefore, communities have the best of this opportunity to ensure that every rural household has FHTC delivering water in adequate quantity (minimum 55 lpcd) of prescribed quality (BIS:10500) and on regular basis as may be decided by the Gram Panchayat. The willingness of community, reflected through Gram Sabha resolution and community contribution will be the foremost criterion for planning of water supply systems in villages.

Part - I

Points you need to know about JJM

1. **Baseline at GP level:** The Gram Panchayats have to verify and confirm the baseline data on the status of household level water tap connections. How many FHTCs are available as of 31st March, 2020? This would also include the type of water supply system – is it a single village scheme or part of a multi-village scheme; main sources of water supply; quality of water; and seasonal variations in quantity of water supply etc.

2. **100% FHTC at GP level:** Plan can be made to provide every household with three delivery points (taps) viz. kitchen, washing and bathing area, and at toilet. Out of the three taps, one tap only will be funded from the Mission. The expenditure to be incurred on extension of pipeline required from the street distribution line for water to reach inside the house to the other two taps will be borne by the households concerned. All the FHTC provided will be linked to Aadhar numbers. Community Contribution shall be 5% of the project cost in cash and / or kind or labour in hilly and NE and Himalayan state villages having more than 50% SC/ST population; and 10% of the capital cost in other villages. Contribution from CSR, private donations, MPLAD and MLALAD shall be treated as money contributed to overall cost of the project, and not treated as community contribution.

3. **Two Types of Schemes:** There will be (i) Single Village Schemes (SVS); and (ii) Multi-Village Schemes (MVS). SVS is a groundwater / spring based / local surface water scheme, which is planned and managed by Gram Panchayat and or its sub-committee i.e. VWSC /PaaniSamiti/ User Group etc. MVS is one connected to some water-grid / regional water supply scheme. However, the role of PHED/RWS Department for construction of in-village infrastructure would remain the same for both SVS and MVS. The difference is, villages that are to be covered under MVS, the PHED/RWS Department would ensure the delivery of water from distribution system into the sump / Over Head Reservoir of the village, where water is pumped from. All the assets created will be geo-tagged.

4. **System Sustainability:** The priority is to upgrade the technical installations so as provide 100% FHTC to all the rural households. In order to ensure this the rural water supply infrastructure created (which is referred to as 'system' here) over the years is to be dovetailed, retrofitted and renovated. The JJM accords priority to retrofit on-going piped water supply schemes, and subsequently to take up completed piped water supply schemes.

5. **Source Sustainability:** Currently hardly 20% of the rural households in India have functional tap connection. When JJM aims at making it 100%, it's not just about investing in laying down the pipelines and the technical structures. For the taps to be sustainably functional there must be *source sustainability measures* taken at the GP level. This includes augmentation of existing water sources, groundwater recharge, rainwater harvesting and grey water management for reuse and recharge (construction of community soak pits/leach pits/waste stabilization ponds), repair and restoration of water bodies, watershed management under WED-PMKSY. Rejuvenation of traditional water bodies (irrigation tanks, disused open wells, old ponds and other water bodies) for community are permissible works under MGNREGS. Districts may undertake a quick and comprehensive survey of such traditional water bodes with details of their present status. Subsequently removal of encouragements in the water-spread area (boundary) of the water bodies can be taken up by relevant Revenue Authorities. Thereafter, their renovation including desilting, construction of in-lets/outlets, catchment area treatment (afforestation etc.) can be taken up on priority.

6. **Greywater Reuse & Disposal:** Under Swachh Bharat Mission-G for Greywater management activities e.g. community soak-pits, waste stabilization ponds etc. conveyance of grey water from the household to the point of treatment / disposal, wherever required, have also been envisaged from the 15th Finance Commission grants to Rural Local Bodies (RLBs) in convergence with MGNREGS.

7. **Water Quality:** How about the villages that have water quality issues? In order to ensure safety of drinking water, water quality (BIS:10500) measures have to be put in place. In villages with sufficient groundwater availability but having quality issues, *in-situ* suitable treatment technologies may be explored. In drought-prone areas conjunctive use of

multiple sources of water, or supply from distant sources can be explored. Where there are serious water quality issues such as arsenic and fluoride contaminants, setting up of community water purification plants (CWPPs) may be taken up to provide at least 8 – 10 lpcd potable water to meet drinking water and cooking needs of every household residing in such villages / habitations. In remote hilly areas option of gravity-based or solar-based water supply schemes with low O & M expenditure may be explored.

8. **Village Action Plan:** Village Action Plan (VAP) is to be prepared based on the type of scheme to be taken up in the village to provide FHTC to every rural household. It is also about tap connection to schools, anganwadi centres, GP buildings, health centres, SHG buildings and other community buildings in rural areas. VAP will be the main document of the village for all water supply related works, and on its approval by Gram Sabha all funds from different sources will be dovetailed to implement various components of VAP including JJM. No work outside VAP will be taken up in the village for a given year.

9. **GP level Human Resources:** JJMs aims at capacitating the Gram Panchayats, and developing human resources at GP level, who are trained in handling the demands of construction, plumbing, electrical, chlorination of water, water quality management, water treatment, catchment protection, and O & M of facilities at GP level. The GP can plan for developing / capacitating local HR requirements through PM Koushal Vikas Yojana. The GP should get in touch with the PMKVY training centres in the vicinity / nearby town, and plan for skilling of the Panchayat staff and local youth, who are to be used for such purposes.

10. **Convergence of Scheme funds:** In order to realise the goal of the Mission the JJM advices the GPs to make use of several other schemes implemented at GP level (besides funds from JJM, SBM-G, and XV FC). For instance water conservation, repair and restoration of water bodies can be taken up under MGNREGS; watershed management can be taken up under the Watershed Development Component of PMKSY (which is the erstwhile IWMP); skill training can be taken up under the PM Koushal Vikas Yojana (PMKVY); Bio-gas under GOBAR-Dhan as well as from the National Biogas and

Organic Manure Programme (NNBOMP) of the Ministry of New and Renewable Energy (MNRE) etc. There are others including State schemes, CSR, MPLAD, MLALAD etc.

11. **Incentive Fund:** The GP / VWSC / *Paani Samiti* are eligible to receive cash incentive from JJM when the scheme has been successfully manged for a year ensuring that every rural household covered under the schemes receives water in adequate quantity of prescribed quality on a regular basis, and water tariff for O & M has been regularly collected. This is to encourage sustainability of the water supply system, and to lend a helping hand in O & M at GP level. The incentive amount will be 10% of the in-village infrastructure cost distributed in a phased manner over a period of five years. The incentive fund will serve as a 'revolving fund' for meeting any urgent repair costs, and the same will be replenished by community. The incentive fund will be provided out of the fund available with the State under JJM (Centre State matching share) in the prevailing funding pattern. Every Gram Panchayat has to meet the electricity bill of the power requirements for pumping water, and distribution of water; carry out minor repairs; chlorination; water quality testing etc.

12. **Operation & Maintenance (O & M):** The Gram Sabha shall pass a resolution putting on record the members of the Village Water and Sanitation Committee (VWSC). O&M would involve recurring costs like electricity charges, chemicals costs, expenditure on preventive and breakdown maintenance, remuneration of pump operators' salary etc. The GP / VWSC shall open an account to receive funds for O & M from different sources such as incentive fund from JJM, Finance Commission grants, and community contribution to meet the recurring charges. The Gram Sabha shall discuss issues such as payment of electricity bill, wastage of water, fixing monthly water tariff etc. See Annexure – VIII for how to prepare water tariff budget.

13. **Explore Innovations:** JJM encourages GPs to explore innovative solutions, and modern technologies in rural water supply - besides planning to sustain the technological interventions already made. For instance, water supply from each Elevated Storage Reservoir(ESR) to be measured using modern sensor-based IoT solutions; meeting the power requirements for pumping through solar and other less-cost alternatives; innovative reject water management in the case of community water purification plants; GIS-based mapping for identifying wastewater drainage lines, or for identifying

watersheds / groundwater recharge locations; to go for artificial glacial reservoirs in order to divert the run-off to freeze and store as glaciers in hilly states such as Himachal Pradesh, Uttarakhand, and in UTs like Ladakh.

Part - II

Recommendations of the XV Finance Commission on Water and Sanitation

The FC-XV in its interim report has recommended a sum of Rs 60,750 crore to PRIs for the year 2020-21. All the tiers in the Panchayats – village, block and district including 5th and 6th schedule areas shall receive the grants. This will enable pooling of resources across villages and blocks to create durable community assets and improve their functionality.

Utilization of Grants: The grants for rural local bodies and for 5th and 6th schedule areas shall be distributed as basic and tied grants in the ratio of 50:50. The 'basic grants are untied', meaning it can be used by the local bodies for location-specific felt needs, except for salary or other establishment expenditure. The 'tied grants' are meant for water and sanitation related expenses only, meaning it cannot be used for purposes other than water and sanitation in GPs. The contents of a joint advisory issued by the Ministry of Panchayati Raj and the Ministry of Jal Sakthi (letter dated: 10th August,2020) is given below.

Subject: Advisory for utilization of 15th Finance Commission grants to Rural Local Bodies (RLBs) for provision of drinking water & sanitation services –regarding.

As you are aware, availability of assured potable water in adequate quantity and of prescribed quality at household level and improved sanitation hold the key for a better quality and disease-free life, thus improving socio-economic condition of people. In accordance with the spirit of 73rd Amendment to the Constitution, it is important that Gram Panchayats (GPs) are empowered to manage these services in villages. In this spirit, successive Finance Commissions have given priority to social sectors *inter alia* water supply and sanitation in the form of State specific grants as well as grants to Panchayats for 'management of water supply' and 'sanitation'.

- 15th Finance Commission in its interim report for the year 2020-21, has identified water supply and sanitation as national priority areas for rural local bodies, and accordingly 50% of Rs. 60,750 crore i.e. Rs. 30,375 crore has been allocated as tied-grants to RLBs

for **(a) sanitation and maintenance of open-defecation free (ODF) status; and (b) supply of drinking water, rain water harvesting and water recycling.** PRIs have to earmark one half of these tied grants for each of these two components. However, if any Gram Panchayat has fully saturated the needs of one category, the particular GP can utilise the funds for the other category.

- During the last five years, huge efforts and investment have been made under ***Swachh Bharat Mission (Grameen)*** (SBM-G) to achieve the Open Defecation Free (ODF) status in villages. Phase-II of SBM(G) has been approved with the aim to sustain the ODF outcomes and to cover all villages in the country with Solid and Liquid Waste Management i.e., ODF plus. Similarly, to ensure that every household in rural areas have piped water supply in adequate quantity and of prescribed quality on long-term basis, Jal Jeevan Mission (JJM) is under implementation in partnership with States. Under JJM, concerted efforts are being made to empower Gram Panchayats and / or its sub-committee to plan, implement, manage, operate and maintain their own water supply system. Under both the schemes, major activities have been identified and illustrative list of such activities under JJM are given below. PRIs can take up additional activities themselves or engage 'service providers' on agreed terms and conditions to achieve the goals that have been set relating to drinking water supply, water conservation, sanitation, solid & liquid waste management.

- The PRIs while utilizing the 15th Finance Commission grants for water and sanitation, shall give priority to cover all the activities identified under JJM and SBM(G) Phase-II, so as to saturate the needs of drinking water and sanitation facilities in the rural areas of the country. The goal with regard to drinking water is long-term sustainability of water supply system to provide minimum service level of 55 litre per person per day of potable water on regular basis.

Illustrative activities (but not exhaustive) under drinking water sector are:

- Augmentation of existing water source(s) of drinking water viz., well recharge, rain water harvesting viz., check dams, rehabilitation of water bodies, watershed and spring-shed management, etc.
- Providing water in institutions like schools, Anganwadi centres, Health centres, etc.

- Retrofitting of existing water supply schemes/ systems to improve service delivery for whole design period.
- Bringing water from nearby surface source, bore well, in-village distribution network, overhead tank (ESR), sump, washing & bathing place for people having small houses, cattle troughs,etc.
- Grey water treatment and its reuse viz. Stabilization pond and associated infrastructure.
- Operation and maintenance of drinking water supply and grey water management systems.

Part - III

Gram Panchayat Development Plan (GPDP)

The JJM Guideline says that the Village Action Plan (VAP) under JJM will be integrated with Gram Panchayat Development Plan (GPDP). The same will be reported in IMIS of JJM. Before we get to know what VAP is, or how to prepare one, it will be in order if we get some idea of what a GPDP is.

GPDP is 'multi-sector development plan' of Gram Panchayat. This comes out of an annual planning exercise, usually carried out between 2nd October and 31st December in all GPs of the country, so that it is ready for implementation by April the following year. GPDP is prepared through a participatory process, involving all the relevant stakeholders. It aims at identifying people's aspirations, needs and priorities so as to meet them with available resources under various rural development programmes (of the centre as well as the State). Priorities identified get tied to scheme-funds available in various departments / ministries for implementation. GPDP is the main rural development and poverty alleviation document of a given Panchayat for the year it's meant for. It's at once realistic and meets the aspirations of the people progressively over a period of time.

The Concept of Perspective Plan and Operational Plan

The GPDP does three essential things:

(i) It provides a vision of what the people would like their village to look like – after one year – after five years;

(ii) Sets out clear goals to achieve that vision; and

(iii) Gives an action plan (along with source of funds) to reach those goals. The GPDP guidelines emphasises every GP to discuss vision in long-term, and at short-term. The

long-term plan is for five years, known as Perspective Plan (say for 2020-2024); and the short-term plan is for one-year, which is the very next upcoming year.

Thus, GPDP is a comprehensive development plan with a view to progressively *improving the overall quality of living* in villages, as well as *sector specific interventions* required to meet the immediate short-falls in essential infrastructures, or livelihoods and employment generation related aspirations of the people. In this sense, the former relates to a *Perspective Plan* about a foreseeable future; and the latter relates to an *Operational Plan* for the upcoming year for which seeking fund allocation from various schemes is possible.

In an actual GPDP exercise people describe how they want their village to look like after five or ten years. They express *the life they aspire for and shall value living; and the village they shall appreciate and feel esteemed being a resident of*. They are allowed to express their wish-list – for the village in its entirety and for themselves as individuals and households. This helps develop a Perspective Plan for the next five or ten years. Subsequently taking into account urgency, importance, feasibility and practicability, a separate annual action plan is prepared, which becomes Operational Plan for the upcoming financial year. Thus, the GPDP team prudently facilitates local people to draw from a perspective plan to make annual action plan, based on discretion, eligibility as per official norms and funds availability etc.

Planning at the GP level enables the following actions.

- Helps identify the magnitude of development gaps in several sectors of development.
- Prioritizes needs based on prudence and pragmatism so as to set a clear development direction for the village.
- Makes scheme implementing officials logically converge schemes at the cutting edge level so that together they render a multiplier effect in terms of programme benefits.
- This interconnection helps avoid putting the cart before the horse, as it often happens when two or more departments work in solitude, resulting wasteful expenditure.
- Provides for convergence and integration of different schemes / departments/sectors
- Optimises the utilization of resources in the larger interest of people.
- Local bodies get trained in practising democracy and elements of good governance such as transparency at the grassroots level

Village Action Plan (VAP)

We mentioned earlier that GPDP is a multi-sector development plan of a given Panchayat. This multi-sector plan literally is a compilation of many sector-specific sub-plans. It is an assemblage or collection of many sub-plans. It incorporates drinking water sub-plan; sanitation and waste management sub-plan; MGNREGS sub-plan; universal health care sub-plan; literacy and education sub-plan; livelihoods promotion and poverty reduction sub-plan; agriculture development sub-plan; animal husbandry sub-plan; horticulture development sub-plan and so on and so forth. All these (and more) sub-plans are compiled to make a comprehensive multi-sector development plan of that Panchayat, which we call the GPDP.

In that order the outcome of GPDP exercise carried out with a focus on drinking water sub-plan is called 'Village Action Plan (VAP) for water sector of that Panchayat'. This is a sub-plan that should get incorporated into the overall GPDP so that the GPDP document becomes complete. Given the mandate that 50% of the XV-FC funds need to be spent on water and sanitation related works, ideally, components on water and sanitation should occupy a substantial space in the GPDP document of every Gram Panchayat in this country.

A generic format for preparing a Village Action Plan (VAP) for drinking water has been given in JJM Guidelines (pp.97 -102). It is reproduced in Annexure – 1. Once approved by the Gram Sabha, this VAP will be the main document of the village for all water supply related works for the year in reference. The GPDP may have other sub-plans such as Labour-budgeting and work plans of MGNREGS; Village Poverty Reduction Plan (VPRP) through SHG / NRLM activities etc. The respective nodal officers shall facilitate the GPs to come out with the sub-plans of such schemes they are in charge of. Who all are involved in preparing VAP that should go into GPDP is presented in the next chapter.

100% FHTC means what?

If a census coded revenue village achieves provision of 100% FHTC to all its households located in all of its wards / habitations / Mohallas / Faliya / Majra / Chord / Palli / Kheda / tola, etc. then it would be declared as 100% FHTC village. If a district achieves provision of 100% FHTC to all households in all its census coded revenue villages, then it would be declared as 100% FHTC district. If a State achieves provision of 100% FHTC to all households in all its districts, then it would be declared as 100% FHTC State.

Functionality Assessment

Functionality of FHTCs will be assessed with following parameters:

- i) Quantity, ii) quality and iii) regularity of water supply through FHTCs:

	Fully-functional	**Partially-functional**	**Non-functional**
Quantity	>=55 lpcd	>40 lpcd <55 lpcd	<40 lpcd
Quality	Potable	Potable	Non potable
Regularity*	12 months or daily basis	9-12 months < daily basis	<9 months < daily basis

i.) Whether sub-committee of Gram Panchayat has been constituted? If so, does the O&M responsibility lie with thm?

ii.) Is water tariff being collected? If so, what's the mechanism in place?

iii.)Is there a bore well recharge structure? What are the other source sustainability measures?

iv.) Has provision been made for grey water management through waste stabilization pond or other structures?

v.) Has provision been made for rain water harvesting?

Chapter – 2

Village Action Plan (VAP) for Rural Water Supply

We mentioned in chapter – 1 that GPDP is a multi-sector development plan of a given Panchayat, and that it's literally is a compilation of many sector-specific sub-plans. The 'sub-plan for rural water supply is called VAP for rural water supply. The VAP, once approved by the Gram Sabha, will be the main document of the village for all water supply related works for the year in reference.

This document may contain the number of habitations in the GP, number of households, current service level[1]; number of households to be provided with FHTC; the local institutions such as school, *anganwadi*, Panchayat Bhavan, SHG meeting hall etc. that require to be provided with functional tap connections; daily water requirements; source of pumping; water quality issues, if any; washing/bathing blocks, if any proposed; adequacy of the source to the population projection; O & M arrangement; capacity building requirements; existing wastewater drainage systems; wastewater disposal arrangement proposed to SBM-G; existing storm water drainage structures; water recharge / storage structures proposed under MGNREGS, WED-PMKSY and other state government schemes; members of Village Water &Sanitation Committee (VWSC) / Paani Samiti approved by the Gram Sabha etc.

For a check-list of data that might be required to prepare VAP see Annexure – II. The VAP contains all these information. Therefore, we can say VAP is the final product. In other words, it is outcome of a process or series of activities carried out as a conscious planning exercise in rural water supply context-specific to the GP in question. The first step in this planning process is *environment creation* for a GPDP exercise, which is taken up after passing a resolution at the GP for taking up JJM in village.

Environment Creation

Environment creation is done partly at the village level, and partly in the official circles in-charge of schemes. All the stakeholders, such as the scheme implementing officials, elected representatives, and a good proportion of the community members come on the same page willing to share the data and information available at their disposal for the purpose of this

[1] A households get below basic service (less than 40 lpcd); basic access (less than 55 lpcd); adequate access (above 55 lpcd); or optimum access (above 70 lpcd); or water is being wasted (above 100 lpcd).

planning exercise. The officers manifest openness, appreciate local priorities, and recognise GPDP as an opportunity to address realistic issues - issues that affect every household on a daily basis.

The community members appreciate the officials getting off their pedestal in order to listen to the priorities of the rural community. People genuinely participate and share their knowledge of situations and conditions, with a sense of responsible well-being, and not raise empty questions and meaningless rights. If this attitude of mutuality and trust is established, we are ready to embark on GPDP exercise.

As duty-bearers it will be in order if the officials / Engineers from PHED/RWS Department take the first step to contact the Gram Panchayat, and propose Environment Creation meeting as a prelude to taking up GPDP exercise. They can also invite nodal officers from other related schemes such as SBM-G, MGNREGS etc. Preliminary discussion may be held on constitution of VWSC and GPPFT (Gram Panchayat Plan Facilitating Team); community participation required during the planning process; and the types of data that might be required etc.

Formation of GPPFT and Firming up of VWSC

VWSC: GP and / or its sub-committee, i.e. VWSC/Paani Smiti/ User Group etc. will function as a legal entity as envisaged in the 73rd Amendment to the Constitution of India. Accordingly, every Gram Panchayat has to constitute VWSC / Paani Samiti approved by the Gram Sabha through a resolution. For instance, the VWSC has certain authorities and responsibilities towards improving the water and sanitation facilities, and management. Why is VWSC necessary and what kind of role and responsibilities they can take up are given in Annexure – III as a model by-law for VWSC. The GPs can customise this VWSC, and orient the members of VWSC to follow this by-law as indicative activities they can take up. There is also a model by-law for Rural Water Supply given in Annexure – IV. This annexure can also help VWSC members in their local water governance effort.

GPPFT: The GPDP Guideline suggests formation of a Gram Panchayat Planning Facilitation Team. The main task of the GPPFT is carrying out thematic situation analysis on water supply using survey and/ or PRA methods; identifying service level gaps, and priorities of the people, which should help prepare a draft VAP for rural water supply. The complete tasks

that the GPPFT should carry out; and the steps they need to follow to be able to come out with a Village Action Plan (VAP) are discussed in the subsequent chapters.

Who all make up the GPPFT, or who are all involved in preparing a VAP for rural water supply, that should become part of GPDP? This doubt is clarified below.

Who all are involved in Preparing a GPDP of VAP for drinking water?

GPDP is a common point or a junction where two or more departments intersect. Identifying the right combination of intersecting departmental activities is vital for prudent convergence to take place. It implies that right team members be called up to be on board. As mentioned earlier, the GPDP Guideline suggests forming a team called Gram Panchayat Planning Facilitation Team (GPPFT). Some local members and elected representatives can be permanent members of GPPFT, while others can join and leave (log in and log out) as per sector-specific / thematic requirements. An Illustrative GPPFT for preparing VAP for Drinking Water Sector is given below.

Elected local body members	**Relevant government officers & Grassroots level Officials**	**Others**
Sarpanch (Panchayat President) – Chairperson GP Secretary – Member Convenor Elected Ward Members Members of VWSC / Paani Samiti	PHED / RWS Dept. Engineers & officials/ concerned. Staff from nearby water quality lab; Block level officers in-charge of SBM-G; and MGNREGS; Irrigation Supervisor / JE from the Irrigation and water Resource Department; Local ASHA, Anganwadi worker	ESR Operator (or Pump Operators as they are called) Local SHGs, if required NGOs, if any working in water sector (selected as ISA Institutional Support Agency).
GPPFT Team may be formed selecting members from the list given above. However, when VAP is prepared and finalised, it must be presented to a larger local group / Gram Sabha.		

In preparing the VAP for drinking water, the SBM-G team from the District Water and Sanitation Mission will also be members of the team GPPFT along with the JJM officials from PHED or RWS Department. The JJM team may facilitate and lead the discussion. Similarly, when it comes to preparing VAP for ODF sustainability and management of solid waste and wastewater (to prepare 'sanitation sub-plan') the staff from PHED/RWS Department shall also take part, however the SBM-G team may take the lead in facilitating the discussion along with the elected local body members.

Orientation to the VWSC & GPPFT members on:

By now, you have idea of what is GPDP, what is VAP, what is VWSC, and what is GPPFT. The VWSC members and the local members of the GPPFT should get at least one-day orientation on planning for rural water supply. Often it's possible the VWSC members may also be local representatives of GPPFT as well. It is good to involve all the elected members of the Gram Panchayat (including the ward members), the Panchayat Secretary, the ESR Operators, SHGs leaders, if any etc. They need to be orientated on the following:

- Basic understanding about JJM & SBM-G phase - II
- GPDP – the idea of Perspective Plan, Operational Plan
- VAP for Rural Water Supply
- Issues of water quality, quantity, and distributional equity in water supply
- The purpose of converging schemes from different departments
- Model by-law on Rural Water Supply
- Model by-law on VWSC
- The steps involved in preparing a VAP for water and sanitation
- Introduce the formats to be used for assessment of existing facilities/sources (see Annexure -IX)
- How a draft VAP looks like?
- Incentive fund from JJM, aspects of Operation and Maintenance

The process of developing a VAP for rural water supply scheme

The process (or the indicative steps) involved in developing a VAP are:

- Environment creation for a participatory planning exercise (on 2nd October)
- The PHED / RWS Department should take the pro-active step in contacting the GP Sarpanch and other functionaries seeking their cooperation and support to form VWSC and GPPF Team in order to conduct the GPDP exercise.
- The PHED/RWS Department should identify nodal officers of other schemes (e.g. SBM-G; MGNREGS, WED-PMKSY etc.) requesting their participation and support.
- Panchayat Resolution for taking JJM in the GP
- Constitution of VWSC in the GP (or firming up if there is one already)
- Identifying and forming GPPF Team for rural water supply planning

- Orientation to the VWSC and local members of GPPFT on GPDP, and the significance of VAP for enhancing rural water supply
- Situation Analysis through PRA, Household Survey and collecting data available with other secondary sources such as Panchayat Office.
- Identifying gaps in service level and infrastructure / facility requirements
- Preparing a Draft Status Report (DSR) / along with Rough Cost Estimate (RCE)
- Presentation of DSR and RCE in the Panchayat Development Seminar at GP
- Identifying Resource Envelop from various Schemes
- Aligning VAP with existing schemes (convergence planning)
- Preparing an indicative Perspective Plan and Realistic Operational Plan
- Finalising the WS-VAP that forms part of the overall GPDP
- Approval of JJM part of the VAP by the Gram Sabha / by the PHED / RWS Dept.
- Report at IMIS of DDWS
- Preparation and finalisation of design, estimates and technical approval as per existing departmental procedures.
- Determination of community contribution and deposit in the bank account
- (Award of work and issue of contract, as per departmental procedures)

In-village infrastructure development and management will be the responsibility of Gram Panchayat and/ or its sub-committee, i.e. VWSC/ Paani Samiti/ User Group, etc. supported by PHED/ RWS Department/ agency and Institutional Support Agency (ISA), whereas infrastructure for bulk transfer of water, distribution systems up to the village boundary will be the responsibility of PHED/ RWS department/board/ corporation, as the case may be. It means in case, the village is to be covered under MVS, the PHED/ RWS Department would ensure the delivery of water from distribution system in to the sump of the village. The role of PHED/ RWS Department for construction of in-village infrastructure would remain the same for both SVS and MVS.

The PHED/ RWS Department would play a key role and provide hand holding support to Gram Panchayat and/or its sub-committee, i.e. VWSC/ Paani Samiti/ User Group, etc. in all technical aspects. It would conduct the test and certify the yield of the source both from

quantity and quality point of view, prepare the design estimate and help the Gram Panchayat and/ or its sub-committee, i.e. VWSC/ Paani Samiti/ User Group, etc.

In villages where Gram Panchayat and/ or its sub-committee, i.e. VWSC/ Paani Samiti/ User Group, etc. is unable to execute the work, the PHED/ RWS Department will carry out the task after design estimate, etc. are presented to Gram Sabha and its approval. However, management, operation and maintenance will be the responsibility of Gram Panchayat and/ or its sub-committee, i.e. VWSC/ Paani Samiti/ User Group, etc.

Chapter – 3

Situation Analysis

The Purpose of Situation Analysis

The purpose of situation analysis is to collect details of the existing scenario of the GP with regard to drinking water supply. Since water is a daily requirement we collect evidences of people's lived experiences on how they manage domestic water requirements on a day to day basis. Community members, especially the women, know the availability of water, source of water, quality issues, hours of water supply, households with / without FHTCs, seasonal variations in water supply, and months they face water scarcity and so on, and so forth. Thus, situation analysis helps identify issues and needs of the community and the gaps where intervention is needed. It can serve as the basis for setting priorities for issues to be incorporated in the VAP.

Data Required to conduct Situation Analysis

Data and Information

When you are assigned the task of preparing a *sub-plan for rural water supply* in a given village, where do you begin? How do you get started? In order to plan, you need data and information about the village in question. You need the details such as number of habitations, population, households; households with / without FHTCs; households that depend on common water collection points or hand pumps; water for toilet use; source of pumping water; the number of ESR or Over Head Tanks (OHT); hours of pumping; length of distribution lines, and areas that remain uncovered etc. In addition we might need data on source of water for irrigation (if it is an agriculture village); water availability at the school, *anganwadi*, at local health centre; at Panchayat office; water for sanitary complex, if any; monthly electricity bill etc. Thus, you need data and information so that you can identify the shortfall / gaps and plan for fulfilling the gaps. See Annexure – II for a checklist and Annexure –V for Basic Information to be collected about the GP.

Sources of Data

How do you get data &information required? Who can give data you need? In other words, what is our source of data for undertaking this planning exercise? Sources of Data to conduct Situation Analysis:

- Primary Sources
- Secondary Sources

Sources of Data	
Primary sources	**Secondary Sources**
Household Survey PRA	Panchayat office records Block Development Office records Government web portals (e.g. Gram Swaraj, Mission Antyodaya, jalshakti-ddws.gov.in, sbm.gov.in, and government accredited water quality testing laboratories (NABL).

Gram Panchayat Office: There are many ways to collect data about Gram Panchayats. We refer to Gram Panchayat here because that is the institution officially (and constitutionally) recognised as elected local body. The GP office is supposed to maintain data pertaining to demographics, socio-economics, and infrastructure facilities in all the habitations of the GP. This is one source of data. We need to approach the Gram Panchayat Office with a check-list of what data we need. Let us consider that this is one good source of data.

Block Development Office: A cluster of Gram Panchayats make up a Development Block. Every Block Development Office (BDO), should maintain grassroots level data, and keep track of various development schemes being implemented in every Gram Panchayat. This can be another source of data.

Government Web portals: There are web portals that maintain data sets of Gram Panchayats. For example, we have www.missionantyodaya.nic.indatabase of the Ministry of Rural Development; egramswaraj.gov.in web portal of the Ministry of Panchyati Raj; www.jalshakti-ddws.gov.in, and www.sbm.gov.in of the Ministry of Jal Shakthi. These web portals are supposed to be dynamic, and provide updated data of all the 2,50,000 Gram Panchayats in the country. By and large, this data is dependable.

Household Survey: Alternatively, we can also go for a household survey. This is a popular way of collecting grassroots level data that mostly NGOs, social science institutions, and social researchers use. This is a primary source of data - collected in a face to face situation. Therefore, the validity can be dependable. However, we need to deploy trained enumerators in the survey process in order to ensure trust worthiness of the data. These days mobile-based

data collection (using ODK Collect or Kobo Collect apps) ensures accuracy and faster collection of data with little need for data cleaning.

Participatory Rural Appraisal: Participatory Rural Appraisal (PRA for short) is an approach to collect data or to learn about situations and conditions in rural areas. This has a menu (or basket of) methods and tools. Depending on the type / nature of data required for our purpose, we can choose appropriate PRA methods and tools for data collection in a given village. We shall see more about PRA tools, methods, principles and applications as we go.

Why PRA?At this moment, it might occur to us now that why do we go for fresh data collection if Gram Panchayat or the BDO office or eGramSwaraj web portal can provide the data we need. Why do we talk about PRA, when household survey is a popular method of data collection, familiar to many of us? The reasons are: first of all, we do not know how old is the secondary data available in the records of GP Office or BDO office. These offices maintain data but we do not know *how updated they are* for our purpose. It happens, often that they refer to household data of Census 2011, when you are in 2020.

Mission Antyodaya / eGramSwaraj data are, by and large, updated and dependable. Yet, we need to bear in mind that Mission Antyodaya is a massive data collection expedition, covering about 2.5 lakh Gram Panchayats – almost every year. It is possible errors can creep in. However, this web portal can serve as a good starting point, or can serve for the purpose of cross-checking the data we collect from other sources.

This does not in any way provide face to face contact with the villagers. You are still facing your computer screen only. A cat with gloves does not catch mice. To do village work, you need to get away from your computer screen, and face the villagers. Household surveys take time - going door to door - collecting data - then computer aided data entry back in the office - data cleaning - data analysis using Excel spread sheets –and draw inferences as to get to know the findings etc. It’s time taking.

The concept of PRA

The concept of PRA tells you to get off your pedestal –get away from your comfort zone: Go to the village. Discuss with them. Ask them. Listen to them. Learn from them. Unlearn.

Relearn. Learn to listen. Make direct observation. They say: *what the eyes do not see, the heart does not grieve about*. Experience the discomfort. The problem you identify in this process, most likely is going to be the real and the most pressing problem of the villagers. Seek local solutions. As how they have been dealing with it in the past – for so many years? Facilitate local solutions. Resist the temptation to instantly offer your advice or expertise.

PRA helps identify real problems of the villagers fairly quickly and accurately. It throws open the magnitude of the issues pertaining to water, and how important it is for the villagers to address them. The PRA process brings to light facts, which in our language we call 'data and information' that we can put to use for preparing meaningful VAP for improving water supply facilities. We come to know the importance and urgency associated with each problem the villagers put across, along with their priority in terms of urgency. This helps prepare a perspective plan for the village, and take up problems – placing them in boxes like one-year plan, and long-term plan.

The following diagram shows the attitude change required for a PRA practitioner. It puts across attitude that does not favour community participation, and those that encourage participation. It's wrong to assume that rural people know less because they are less literate compared to you. Recognise that they have abilities and earnestness to lead a life they value living. They have their right to decide, and they have self-respect – however poor one may be.

Attitude Change Required

Wrong Attitude	Right Attitude
Villagers are: ▪ **M**ud-headed ▪ **O**rthodox ▪ **U**nchanging ▪ **T**raditional ▪ **H**esitant	***Villagers have :*** • **E**arnestness • **A**bility • **R**ight • **S**elf-Respect

Do your homework, and go back to them in order to present how you think your technical expertise can solve the problem that was identified. Check and weigh the social acceptability, technical feasibility, financial viability, and what scheme of the government can help resolve the problem in hand. Find out: how villagers can participate / contribute? Determine your role

in the project. By now, you have got the data / information you needed. You have also got closer to the community members you are dealing with. Now, prepare your draft VAP for presentation to the Gram Sabha. This is the approach PRA proposes. In this process you may have to use a battery of PRA methods and techniques, which we shall learn in the upcoming section in this handbook.

We need to bear in mind that we are doing a 'thematic PRA on drinking water'. But, in a real village setting people face not only drinking water problem. Each individual / family may have their problems – it may relate to local land disputes; issues of under-weighment in PDS; opinion about minimum support price for agricultural produces and so on and so forth. The GPPFT should know how to tactfully facilitate the discussion for we cannot afford to spend time discussing anything people wish to discuss about. Tactfully steer clear, and focus thematically on water-related issues only.

PRA application for situation analysis

With this basic understanding about data collection and the concept of PRA we can now move into actual application of PRA in order to collect the data we need for drafting a VAP for rural water supply. The following are the indicative steps, along with a list of PRA tools / methods we can use for a 'thematic PRA on rural water supply'.

1. Transect Walk
2. (Thematic) Social Map
3. (Thematic) Resource Map
4. (Thematic) Seasonality Analysis
5. (Thematic) Problem Analysis
6. Problem Prioritization (NSL Chart)
7. Solution Assessment (Matrix Ranking)
8. Skill Gap Analysis
9. Draft Status Report (along with Rough Cost Estimate)
10. Panchayat Development Seminar (Draft VAP approved by GP Ready)

Let's try to understand each one of these tools / methods briefly, and how to operationalise it. This section will show you how to actually conduct these exercises in the village.

EXERCISE – 1: Transect Walk

What is this? This is a *guided walk* that the GPPFT take in the village. Perhaps, this is the first-time ever this mix of people walk in the village street together. This is an *observational walk*. Take a walk in village streets and lanes, observing various water supply infrastructures at the household level, the condition of existing FHTCs, community water collection points, source of water, pump room, water availability for toilets, in schools, *anganwadis* etc. This is not a hurried walk. Stop where required, discuss, ask and understand.

Outcome Expected: This helps you form a *mental overview* of the village. You can make notes. Click photos if they can be of use as data. This will prepare you to get down facilitating the villagers to draw a social map, which is the next important PRA exercise you shall be conducting in the village for data collection. Thirdly, by the time you complete your observational walk, you would find you have some understanding of the settlement pattern, the landscape, density and spread of houses, know the names of all those who walked with you, their background, interests, and concerns they shared with you of water supply that you need to 'probe' during subsequent PRA exercises.

Caution: *Observation does not mean watching and assuming*. Remember observation always involves discussion. Observe. Ask. Discuss. Seek clarification. If you take a 'power-walk' watching and assuming, that's not going to help understand the village.

EXERCISE – 2: (Thematic) Social Map

What is this? This is 'village map' as drawn by the villagers on the ground (not to scale) – using *rangoli* powder or chalk piece etc. This is an Ariel view photograph of the village showing the landscape, settlement pattern, all the streets, lanes, houses, institutions, common water supply infrastructure etc.

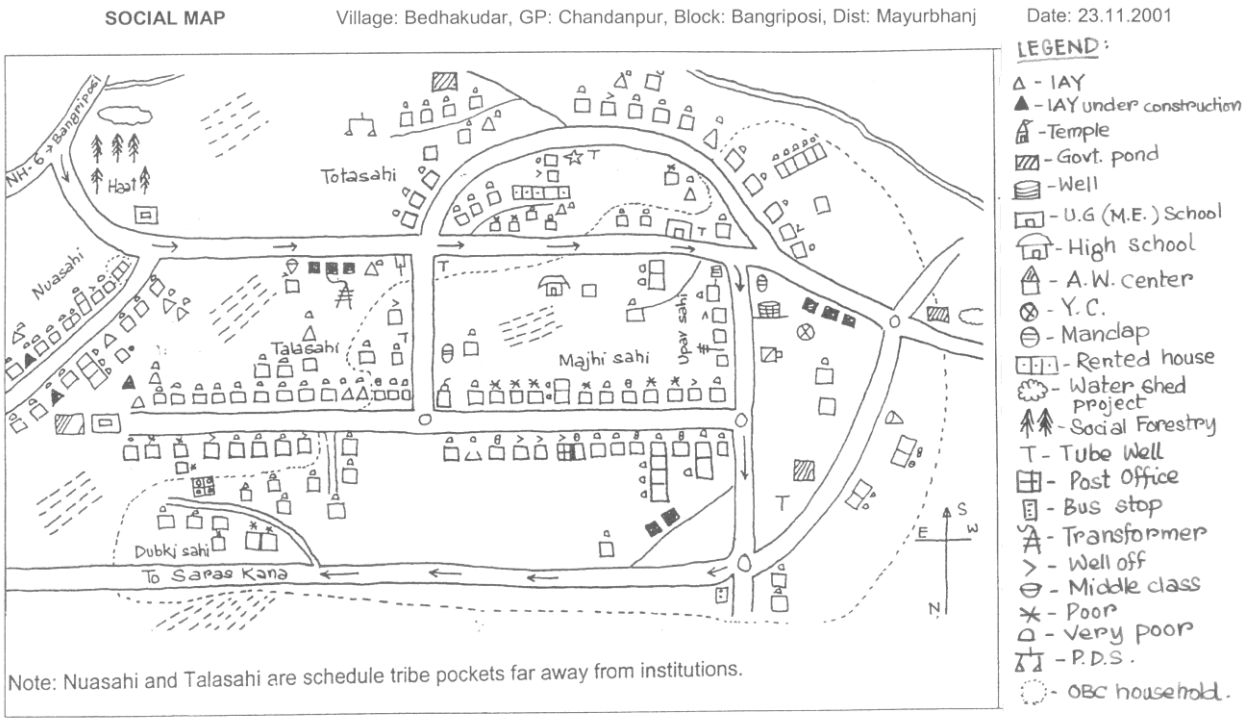
What is depicted in the Map? Village Map, first of all, depicts all the streets, and lanes in the village. This is followed by marking the locations where various institutions such as

Panchayat Office, community hall, School, *Anganwadi*, Health Centre; and location of other common infrastructure in the village i.e. ESR / OHT, Pump Room, hand-pumps / common water collection points, streets covered by / not covered by water supply etc. Then, they depict all the houses street-wise. This is people's map. We can copy the map on a chart, if we require.

If there are 240 houses, all the houses are drawn. Yes, it takes about 3 – 4 hours. If Gram Panchayat has more than one hamlet / village, you'd better do it separately with relevant participants. Each house is numbered (and a card is prepared assigning a number along with name of the Head of the Household, which makes it easy to make any further reference to that house). Have patience. Let the map come on the ground. Once social map is ready on the ground, information about each household can be collected.

For instance, you want to know the hand pumps that are working / not working, the villagers can mark the locations in the map, count and tell you, which ones are functional / defunct; if you want to know houses with / without toilet, they can tell you; if we are looking for households that have toilet, but not using, they can mark those households in the map; if you want to know houses that has water tap connection, they can tell you; if you want to know houses that depend on common water collection points, they can mark in the map; if you want them to identify in the map houses that has cow / buffalo / sheep, they can identify etc. Thus, social map can give you any information you think you need. We can get to know the

total number of households in each habitation; households that require to be provided with FHTC etc. This is fairly quick and accurate, rather than depending on any secondary data. Thus, social map can generate a wealth of information, you need. See Annexures – XI & XII.



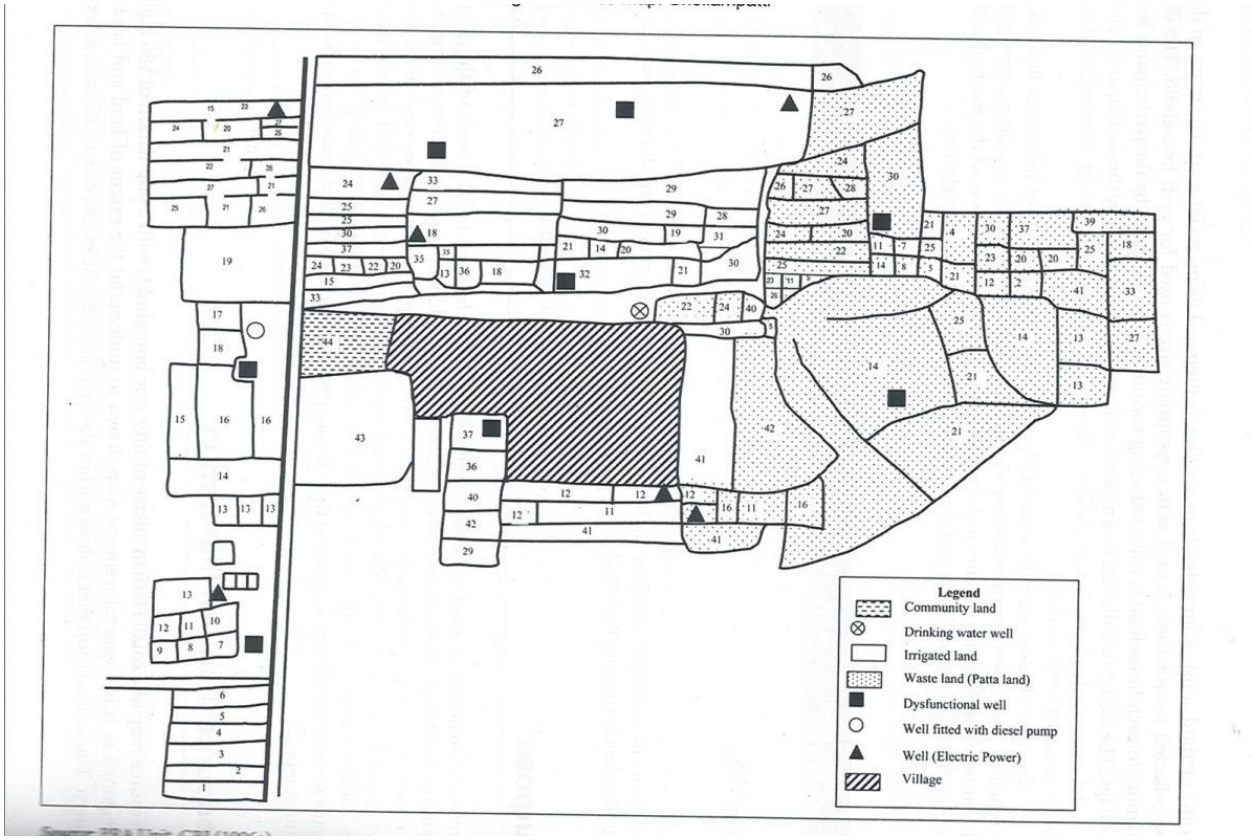
Who participates? In drawing social map it is good to involve young men, women, and middle school level children also. They can actively involve in drawing the map. When it comes to collecting data from a completed social map, it is good to ensure people from respective streets are present so that they can give accurate data, and confirm accuracy of the data. This helps collecting reliable information, which can be claimed valid.

Outcome Expected: Social Map that the villagers drew on the ground can be copied on a chart paper for our use, if we require. It is good to ensure a copy of the map is available with the Panchayat Office for future reference /use. Thus, the household data and water supply facilities related data you needed about the village can be obtained from social map.

EXERCISE – 3: (Thematic) Resource Map (&water budgeting)

What is this? This is 'water resource map'as drawn by the villagers on the ground (not to scale) – using *rangoli* powder or chalk piece etc. This is an Ariel view photograph of the

village and farm lands showing all the ponds, tanks, open wells, irrigation wells, storm water ways, watershed areas, *nullas* irrigation channels, and river coursesthat serve as source of water. This can be identified during transect walk itself, if we extend our walk into the farm lands, and take pains to visit all these natural and man-made water holding structures. We can make note. If required this can be drawn as a map. Alternatively, GIS maps can also best help in capturing such data. JJM encourages use of GIS maps for such purposes.



The purpose: The purpose of resource map may be partly understandable from the above description. A Resource Map can help obtain data and information about sources of water; potentials for taking up water conservation / storage structures, which can help as source sustainability measures. Secondly, it can help conduct a water budgeting exercise (See Annexure – VII) on competing use of water amongst different purposes such as drinking, irrigation, water for cattle use etc. Thirdly, it can help suggest activities that MGNREGS can take up or WED-PMKSY can take up in order to improve ground water source sustainability.

EXERCISE – 4: (Thematic) Seasonality Analysis

What is this? Seasonal variation in water availability is quite apparent. Main sources that provided for high draft in certain months of a year often dry up in summer. People undergo difficult times due to scarcity of water during summer months, having to walk long distances to fetch water for domestic purposes. This is an important element of data the planners need to take into account while designing water supply infrastructures. Seasonality analysis brings it to light.

How to depict this? A monthly calendar with 12 months may be drawn. It is good to use the calendar months people understand, rather than English calendar. The months can be grouped based on seasons such as the following. Or if the people wish to have three or two categories based on their experience and reasoning, we can let them have it. The purpose is they must use it as an aid in order to make us understand 'seasonality and water availability in various sources / facilities.

A Typical Seasonal Calendar (that captures local experience of water availability)

	Winter			**Summer**				**Monsoon**			**Autumn**	
Facility / Source	Dec.	Jan.	Feb	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.
Type of point Source (Locations)	Highly dependable Partially Dependable Undependable			Highly dependable Partially Dependable Undependable				Highly dependable Partially Dependable Undependable			Highly dependable Partially Dependable Undependable	
Type of pumping Source (Locations)	Highly dependable Partially Dependable Undependable			Highly dependable Partially Dependable Undependable				Highly dependable Partially Dependable Undependable			Highly dependable Partially Dependable Undependable	

In a matrix, let them list all the sources of water (names of ponds, lakes, brooks, open wells, irrigation wells etc.) on one axis, and the seasons on the other axis. Let them mark in the calendar, which source lasts for how many months; which ones are lasting and which ones are very short lived. This should help generate a discussion on water availability in different seasons. This can take the direction of the discussion into, which are the watersheds that have high water storage potential / recharge potential, yet under harvested / under-utilized; which ponds require deepening / de-silting? which water ways require clearing up? which water courses require check-dams; which water courses require an artificial percolation pond and so on.

Outcome: The data generated from Seasonality Analysis together with data from Resource Map can help planning for improving ground water recharge, source sustainability, water availability when action is initiated through schemes like MGNREGS, WED-PMKSY etc.

EXERCISE – 5: (Thematic) Problem Analysis

What is this? This is about analyzing – through a Focus Group Discussion – all the issues and concerns related to water in general and drinking water in particular. This is again thematic in focus. We need to understand that people tend to raise issues irrelevant to the 'theme' because it's possible they were looking for a platform to raise an issue that has been bothering them for long such as the irregularities in the local ration shop, or a pending land dispute between two neighbours. The GPPFT should know the knack of steering it clear to focus on the issue in question i.e. water.

How is this depicted? We initiate this exercise asking the people to tell you one or two pressing problems with regard to water for domestic use. When one of the participants raises an issue, if others too felt that to be a serious issue, they tend to join in describing and explaining how lack of 'that facility' affects lives and livelihoods in that village. That issue is written down in a card (post card size card) and is kept in front of everyone. Then someone comes up with a second issue, third issue, fourth issue and so on. Have patience. Allow them to decide, analyse and judge what issues are important.

Alternatively, what you can do is, based on the data collected so far, we can ask one of the local GPPFT members to summarize the main issues that have come up. Let each issue be written on a card (post-card-size-card), and placed for everyone present to see and opine. Each card shall carry only one issue, and let each issue be discussed thoroughly. The issues can be in terms of availability of water; adequacy of water supply facilities; sustainability of source; seasonal variation in water availability; accessibility of water to local institutions; FHTCs; user payment issues or payment of electricity bill; wastage / misuse of drinking water for other purposes; Operation and Maintenance issues etc.

List of problems (pasted on a wall) identified by people using postcards / sticky notes

Outcome: By the end of this exercise, we may have 12 – 15 cards – each card, with one issue to be addressed. These are the main issues with regard to water supply in that village. These can relate to lack of infrastructure, which has to find place in the VAP for planning; it can relate to GP that needs to take action about non-payment of water tariff or pending electricity bill payment; it can relate to households that waste/misuse drinking water for purposes not it is meant for. This exercise will round up all the issues, while providing the data required by the GPPFT (including the PHED / RWS Department) for planning purposes.

Note: Through semi-structured interviewing, you need to identify the problems of the local people from their perspective through their lived experiences, and priority. It is their problems, they are listing. You are only facilitating – not prompting or assessing / judging.

The households in a village know only if they are getting water or not; and if the quality of the water is satisfactory for domestic use. There is very little chance of their knowing about the condition of the water supply infrastructures. It's the key informants like Power Pump operators, and local hand pump mechanics, who confront on a day to day basis the problems in the technical infrastructure, and what requires to be renovated etc. They will be a good source of information in order to determine what facilities require renovating / replacement etc.

Therefore, 'problem analysis exercise' can also be repeated with *key informants group* in the GP. The key informants group as far as village water supply facilities are concerned are Power Pump Operators, the hand pump mechanics, local electricians, if any. Therefore, the

problem analysis exercise can be repeated with this group exclusively because they know how old are the installations, how old is the pump set / pump room, condition of wiring etc. This group can throw light on: condition of the bore-well / tube-well; pumping machinery; pump house; rising main (from pump to the storage tank); condition of the storage tank; distribution network; number of existing FHTCs approved / unapproved; quality of water from each source and so on.

EXERCISE – 6: Skill Gap Analysis (through a Venn Diagram)

Operation and maintenance of drinking water supply require special skill-sets. In every GP there are local power pump operators. They hold enormous responsibility in terms of O & M. But, often it happens, they acquire their skills by DIY methods, and by trial and error. They need to have at least certain essential understanding (perhaps, at elementary level) how various water lifting devices (pumps) work; what is the purpose of a fuse wire and what thickness it should be in; how to change a fuse wire; identify any malfunctioning in the electric connection; how to rectify / or take preventive action so as to ward off from big damages; attend to leakage in pipelines; how to use various tools meant for plumbing; how to fix a control valve (water regulator) in a distribution line / service line; what is the right amount of chlorine to use; and the skill to mix chlorine in water and so on. An indicative list of skill-sets is given in Annexure – XIII. As part of data collection for preparing we need to do a skill gap analysis, which will help planning for capacity building training to fill the skill-gap.

How to identify the skill gap?

In PRA menu we have an exercise called ‘Venn Diagram’. This exercise is often used for the purpose of identifying gaps in service delivery. With a little imagination, and ingenuity Venn Diagram can be used for identifying skills gaps.

The Participants: This exercise is to be done with an exclusive group of Power Pump Operators, local hand pump mechanics, local electricians, the Sarpanch / Up-sarpanch and any elected ward member who is aware of the water supply system in the village. Explaining this exercise may take time. But it’s essential people understand this exercise clearly before it is started.

Materials Required

First, from a chart paper cut three different size circles (*chapattis* of different sizes). One can be approximately 3 cm radius; the second one can be 4 cm radius; and the third one can be 5 cm radius. Make at least about 8 – 10 of each circle so that you have approximately 25 – 30 of different sizes.

Steps Involved

Let the participants list out (in a long chart paper) all the technical skills required to operate and maintain a water supply system. See Annexure – XIII for a sample list of technical skills. You can prompt if required. Let them exhaust the listing.

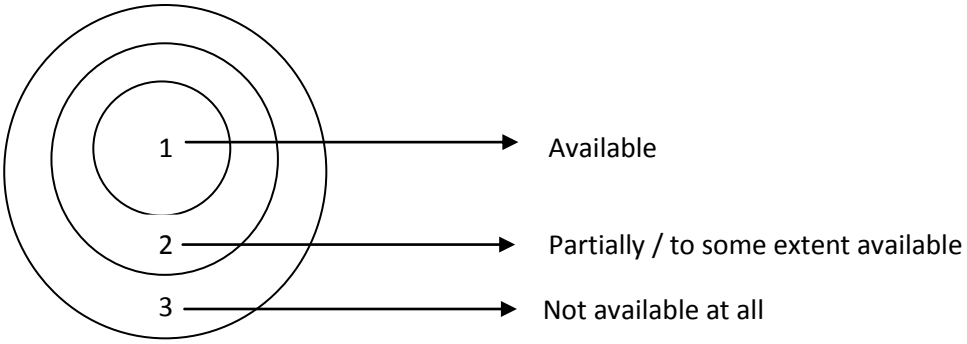
Secondly, read out each skill they have listed (one skill at a time), and ask them: how important that skill is, in terms of *importance and frequency of use of that skill* in their day to day work.At this stage, refresh the meaning of each *chappati* by size.

Degree of importance of a skill	**Represented by size of the *Chappati***
Extremely Important	5 cm *chappati*
Moderately Important	4 cm *chappati*
Marginally Important	3 cm *chappati*

If a skill is considered *'extremely important'*, let them pick up a 5 cm radius *Chappati* and write 'that skill' in that *chappati*; if it is '*moderately important'*, let them pick up a 4 cm radius *chappati* and write 'that skill' there; and if it is '*marginally important'*, them pick up a 3 cm *chappati* and write it there. Repeat this for every skill listed out at the beginning of this exercise. Now, you have all the skills sorted based on degree of '*importance*'. All the *chappatis* you have in hand represent different skills, based on '*importance and frequency of use*'.

Now, it's time we ask the participants to place each *chappati* at appropriate place in the chart below, depending on *availability / non-availability of that skill in the village* /amongst the Power Pump Operators, and others meant for O & M of water supply installations.

	Availability of a skill	Represented by distance from the center	Meaning
1.	Inner most circle	Available	Skill already exists. No training required.
2.	Second rung	Partially available (to some available)	Require a refresher training
3.	Third rung	Not available at all	Require full-fledged training

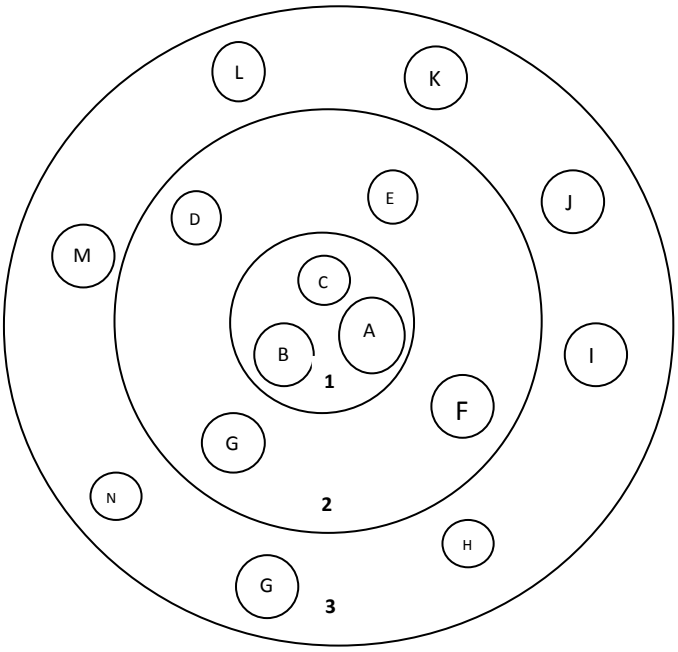


No.1 The centre of the circle indicates the skill mentioned in the *chappati* is ***available;***

No.2 the next rung indicates the skill mentioned in the *chappati* is ***partially available***

No.3 the third rung indicates that the skill mentioned in the *chappati* is ***not available at all***.

An Illustration of Venn diagram output



The skill types various sizes of *chappatis* in the Venn Diagram represent

A	Recognise technical variations amongst submersible pump, centrifugal pump, indigenous pumps
B	Distinguish various types of pipes, fittings and fixures
C	Various types of tools used and tools handling
D	Types of safety controls in electrically operated water lifting devices
E	Providing FHTC from the distribution line
F	Installation of basic plumbing systems
G	Repair of basic plumbing systems
H	Matching power output and efficiency of pumps
I	Repair and replace defective parts in electrical connections
J	Repair and replace defective parts in foot valve suction, delivery and suction line, coupling etc.
K	Aware of the common faults in electrical motors and electrical connections
L	Know-how to change fuse in the electrical board at the pump room
M	Aware of the right amount of chlorine to use
N	Read and understand a water quality test report

Skill Gap Analysis thus, helps you to (i) identify and list out the skill-sets required for sustainable O & M of water supply installations; (ii) find out which skills are important and frequently required / used; and (iii) which skills are locally available, partially available, and not available at all. This can help like a Training Need Assessment (TNA), to determine what skills are lacking in order to ensure sustainable O & M. Plan for honing those skills through appropriate skill training through DDU-GKY or through other technical institutions in the vicinity.

EXERCISE – 7: Visioning Exercise (Now, Soon, Later) Chart

Visioning exercise aims at finding out the desire / fond wish of community members on how they would like their village to look-like after one year; after five years from now – especially with regard to water supply for households and local institutions. This can be in terms of ease of access, adequacy, safety of water and so on.

What is this? This is also an attempt to classify (the problems identified) based on urgency and importance. All the cards (each containing a problem) are to be placed into two or three boxes as shown in the picture below. This helps determine which issues are urgent that require going into the immediate operational plan (in the upcoming financial year for which the VAP is being prepared), and which ones can be taken up in the subsequent years.

Typical NSL Chart (Sample)

NOW - N (within one year)	**SOON - S (within three years)**	**LATER - L (within five years)**
• 100% FHTCs coverage within one year. • The toilets in the primary school and *anganwadi* be rendered usable with water line facility. • Renovate all ponds, and water storage structures in the village. • The GP empanels a list of agencies to attend to preventive / breakdown maintenance. • All the households pay water tariff as prescribed. • IoT-based sensor set up so as to end water wastage/ overflow from OHT/ESR.	• Survey and count HH without drinking water tap connection / those with illegal water tap connection and those who use motors for sucking water from pipeline. • Regularize unapproved tap connection & remove water taps where pumps are used for sucking water from water distribution lines. • Power pump operators are trained in preventive maintenance, and minor break down maintenance. • Periodical water quality test in place.	• All office / school buildings and premises to have roof-water harvesting structures. • Every farm to have a farm pond for water storage. • Groundwater recharge pits be made in 20 strategic points in the village. • 1000 tree saplings be planted in common & private lands. • Ensure all the public institutions have safe water supply facility, and ensure that the wastewater disposal made scientific.

How to carry out this exercise? We draw these boxes in a chart paper. First or all, the facilitator clarifies that all the problems cannot be addressed straight away instantaneously (if that is the case) we need to decide on the timelines. Therefore, he writes NOW, SOON, LATER on the top of the chart. Let the community members (or local GPPFT members)

define the period that can make NOW; the period that can make SOON; and the period that can make LATER.

Once this is clear, the facilitator takes one of the 'problem cards' – one card at a time - reads out the problem written up there, and places it in front of the community members (local participants). Then he asks about the urgency of 'that problem' in relation to other serious problems they have written in other cards. The community members start discussing and giving their opinions on how serious that card ['that problem'] in question is. After a thorough discussion the community members have to decide unanimously, which of the three boxes 'this card' goes in. Is it under N or S or L? Thus, every card is discussed, and each card finds its appropriate place in terms of urgency, importance and feasibility. At this point, it's possible, some cards might get discarded as well. It doesn't matter to you so long as it's not something vital they are discarding. If, in your opinion, it's vital, you can seek out of curiosity their explanation / justification for discarding that card.

EXERCISE – 8: Solution Assessment

What is this? Problems have been analysed and priorities have been set by the people. Now, let them come out with possible solutions. Or what kind of facilities and management models they think can resolve the issues. This can be done on the ground, or on a chart paper.

How is this exercise carried out? We can go for a Ranking Criteria Matrix. This is a PRA method, where all the solutions are listed, and matched against certain acceptable criteria. Let the people come out with their own criteria. The facilitators (GPPFT) can add at the end, if people agreed to add your criteria to their list of criteria. You can ask if they want to consider the criteria to be not only socially acceptable but also technically sound and financially viable. It must be easy to operate and maintain locally. What kind of management model shall fit alright? Can the Panchayat take over, or assign it to some SHGs, or local NGOs specializing in water sector, or private service providers etc.

Ranking Criteria Matrix

	Solution - 1(Renovate just enough to provide additional FHTCs – and the GP will take up O & M)	Solution - 2(Join in a feasible MVS, and provide FHTCs – the GP will do O & M)	Solution - 3(Renovate completely as full-fledged SVS& provide FHTCs – GP will do O & M)	Solution – 4(Renovate completely as full-fledged SVS, contract it out to Private operators for O&M)	Remarks
Criteria -1 (Community Acceptance)	3	2	4	1	
Criteria -2 (Technical easiness to use and operate)	3	3	4	3	
Criteria -3 (Fund support from scheme / HH)	4	3	4	2	
Criteria -4 (Maintenance)	3	3	3	4	
Score	**13**	**11**	**15**	**10**	
Rank	**II**	**III**	**I**	**IV**	

Score:4 = Most preferred; 3 = moderately preferred; 2 = slightly preferred; 1 = Least Preferred

The purpose: Selecting the 'most preferred solution' for implementation in order to resolve a pressing problem identified through 'NSL Chart'. For ease of understanding, we have used fictitious numbers in the simplified illustration above. The same idea can be modified to use in a variety of situations, where we need to understand and record community preference.

Outcome Expected: The most suitable solution to the problem in question emerges through people's consensus based on their scoring and ranking. You come to know people's preference, and why they choose what they choose – their reasons behind the choice.

Caution: Clear understanding of the method is important. The PRA facilitator involves himself in the participatory analysis of the solutions based on the criteria evolved by people. Let the people begin the scoring only after you make sure that everyone has understood the method and the purpose of the exercise. People can suggest if there is any other way that is more scientific to assess the appropriateness of the solution.

EXERCISE – 9: Rough Cost Estimate & Draft Status Report

By now, the types of facilities required, and those that require renovating are ready. It may be possible for the PHED / RWS Engineers in the GPPFT to work out and give an idea of rough cost estimate. This will help the community to come to know the amount of financial

contribution they may have to mobilize locally in order to have JJM implemented in the GP. This is a decision point for the community / GP to consider if they still want to go ahead with the 'Solution option' they chose in the first place, or they would like to introduce a revision in the draft VAP that has come up so far. This is important from the point of view of: (i) community contribution to be made for JJM to become operational in the GP; (ii) ease / difficulty involved in maintenance of the system being proposed.

At this stage we have the draft status report, and draft Village Action Plan (VAP) on water ready for the GP. This can be firmed up, taking cues from the format for DPR preparation at Annexure - VI. All the data and maps collected which describe the existing status of facilities, service, and maintenance become evidence that hold up / support what led the GPPFT to arrive at this plan.

EXERCISE – 10: Panchayat Development Seminar

What is this? All these PRA exercises have been conducted in different locations of the Gram Panchayat. In this final sitting with the villagers, almost every one belonging to the village – irrespective of their participation and non-participation in the previous PRA exercises - is invited to participate. Everyone should get to know the entire process and the outcome of the series of exercises conducted in the village over a period of 2 – 3 days. In GPDP this is called Panchayat Development Seminar.

How is this exercise carried out? The outcome of every PRA exercise – starting from Social Map, Resource Map, Problems listed; Priority that got into each cubicle of the N-S-L chart; and the problems that got to the top in the list of 'priority issues to be addressed' are put across to everyone.

Who participates? This is almost a Gram Sabha, (where we have everyone including the school going children, school and *anganwadi* teachers etc).

The purpose: The purpose is everyone should come to know the problems listed, priority arrived at, the solutions considered, and the final solution that is most likely to be taken up for implementation.

Outcome Expected: The data generated through all the PRA exercises, thus get validated by larger group of people. The draft final VAP on water supply that has got ready through a series of participatory exercises is made transparent to everyone in the GP.

Caution: This is a larger group with people of varying interests – political, religious and other affiliations. Therefore, the crowd must be handled carefully without getting into local conflicts and political differences / controversies. A development seminar must be conducted like one, and there should be nothing political about it or anyone is allowed to paint a political colour to the occurrence or the outcome.

Chapter – 4

Finalising the VAP

Resource Envelop

The VAP is ready as a convergent plan. The next step is to find the financial resources that can be tapped from various schemes (including the State government's) in order to implement the plan. All those components that JJM can accommodate as per JJM guidelines can directly be taken up by PHED / RWS Department for the preparation of designs, cost estimates and technical approval as per the departmental procedures. The VAP possibly has components that must go into the SBM-G, and other schemes that must go into the Annual work plan of MGNREGS or into WED-RMKSY etc. Identifying resources to be able to implement the VAP by taping resources from various schemes is called 'Resource envelop'. Thus, the next step is aligning VAP with the existing schemes. This, in other words, is Convergence Planning.

Convergence Planning

Ministries / Departments and Major Deliverables (Indicative)

Sl.No.	Issues in Question	Ministry / Department concerned
1.	**Drinking Water** Piped water supply for every household Water supply to all the IHHLs Pipe-line extension for covering uncovered households Creation of new Over Head Tank, Pump Room Renovation of water supply infrastructure Drainage systems Water quality surveillance / Testing Labs Addressing water quality problems Rain water harvesting Water for school toilets, water for GP office, water for Health Centre	(Ministry of Jal Sakthi) Department of Drinking Water and Sanitation Jal Jeevan Mission (JJM) Dept Rural Water Supply Water Quality Labs. District / Block Water and Sanitation Mission
2.	**Sanitation** Centralised wastewater treatment system Household level wastewater treatment system	Swachh Bharat Mission-(Gramin) District SBM-G office Block SBM-G office

3.	**Water Conservation** Water conservation, water storage structure, watershed, pond renovation, rainwater drainage. PMAY - Housing for all	Department of Rural Devt. (MGNREGS) Department of Rural Development (Block Devt. Office) Ministry of Skill Development & Entrepreneurship (State / District level Skill Development Mission) RUDSETIs
4.	**Skill Training for water supply Maintenance** Training of Power Pump Operators Training hand pump mechanics Training in water treatment, purification methods, chlorination	Ministry of Skill Development & Entrepreneurship DDU-GKY
5.	**Capacity Building of Panchayats and orientation to Panchayat functionaries** Orientation on JJM Orientation on rural water supply management, and VWSC by-law Local governance of water supply (with a special emphasis on financial management) Local governance of water supply (with a special emphasis on O & M).	SIRDs NIRD&PR

- **Indicative Perspective Plan (2020-24)**

  Prepare a five-year Perspective Plan, based on community priority identified. The VAP will be approved in the *Gram Sabha,* when 80% of the village community present in the meeting agree to the prepared plan. VAP will then be submitted to DWSM for further action. Technical approval will be accorded by PHED/RWS Department / Board.

- **Realistic Operational Plan (2021-2022)**

  Prepare a one-year operational plan, which will be incorporated as Annual water supply sub-plan for the year 2021-22.

- **DPR Preparation for Rural Water Supply**

  (as given in the JJM Guidelines – see Annexure - VI)

- **The departmental procedures take over**

Preparation of VAP	GP / PHED / RWS Department
Approval of VAP	Gram Sabha
Preparation & Finalization of design, estimates and technical approval as per departmental procedures	PHED / RWS Department
Administrative approval of estimates	DWSM
Determination of community contribution and its deposition in the bank account	GP
Obtaining necessary statutory clearances	DWSM
Award of work and issue of contract	PHED / RWS Department
Monitor work execution by contractors	GP – VWSC PHED / RWS Department

Note: DWSM to priority to villages that have successfully completed the planning and mobilization phase early.

Annexure - 1

Village Action Plan (VAP)

To identify all water related activities which helps in improving 'ease of living' of village community. (To be prepared by GP and / or its sub-committee, i.e. VWSC/Paani Samiti/ User Group etc. and to be approved in *Gram Sabha* before submitting to DWSM. ISA is to provide handhold support).

1. Date of preparation :_____
   Date of approval in *Gram Sabha:*_____
   Date submitted to DWSM:_____
2. Village name:_____
   GP name:_____
   Block name:_____
   District name:_____
   State name:_____
   Village census code:_____
   (No. of habitations and habitation names, if applicable)

I. GP Resolution

3. **Aspiration of village community:** FHTC to _____ number of rural households by year _____with water supply in adequate quantity of _____lpcd of prescribed quality* on a regular basis, i.e._____ no. of hours every day along with water supply to _____ no. of cattle troughs and _____ no. of washing/bathing blocks.

   We, the village community, take the responsibility to own, manage, operate and maintain our in-village water supply infrastructure. We will respect and protect our water bodies and will not contaminate them. We will manage our grey water and save our fresh water.

   It is resolved to pay_____% of capital cost, calculated share of O&M cost and contribute in managing water supply system.

   *water quality certificate to be issued by PHED/RWS Dept.

II. Gram Panchayat and / or its sub-committee, i.e. VWSC/Paani Samiti/ User Group etc. details

4. Which committee will lead the planning, implementation, management O&M of water supply scheme in village ? (GP and / or its sub-committee):_____what is the committee called:_____ Chairperson name:_____
5. Gender :_____ Age:_____
6.

Member name	Gender	Age

III. General details

7.

As per 2011 Census:	As per current Panchayat / Anganwadi records:
Population:_____	Current population:_____
No. of HHs:_____	No. of HHs:_____
No. of Women:_____	No. of Women:_____
No. of men:_____	No. of men:_____
No. of children:_____	No. of children:_____
No. of FHTCs:_____	No. of FHTCs:_____

8. **Population projection:**

   Intermediate stage – 15 years from date (18% increase over present population):____ Kilo Litre / Day (KLD)

   Ultimate stage – 30 years from date (32% increase over present population):_____Kilo Litre / Day (KLD)
9. Current cattle population (Animal husbandry records):_____
10. Agricultural cropping pattern:_____

Major crops	Kharif	Rabi
Sugarcane		
Paddy		
Maize		
Cotton		
Wheat		
Other		

11. Average district rainfall (in mm):_____
12. Topography (plain, slope, etc):_____
13. Is resource mapping done ? (Y/N)

    (attach the map with VAP)
14. Is social mapping done? (Y/N)

    (attach the map with VAP)
15.

S.No.	Public Institutions Name	Is FHTC available? (Y/N)	Is Rain Water Harvesting structure available ? (Y/N)	Soak pits available? (Y/N)
1.	School			
2.	Anganwadi			
3.	Health Centre			
4.	GP Building			
5.	Other			

Total daily requirement of water

16. Present requirement of water – poop" X rate:_____KLD

    Present requirement of water for cattle:_____KLD

    No. of cattle troughs required:_____

    Requirement of water for intermediate stage – pop" X rate:_____KLD

    Requirement of water for ultimate stage – pop" X rate:_____KLD

History of water supply

17. History of water supply/ availability in the village, drought/scarcity/cyclone/flood or any other natural calamity pattern, general trend of water availability:
18. Any history of emergency arrangements like water supply through tanks, trains, etc.:

19. History of part work related to water supply, source strengthening,
20. History of water-borne diseases:

Water quality

21. Dates identified for WQ surveillance with community using FTKs/vials:____
22. Dates identified for sanitary inspection:_____
23. Water quality of existing / proposed drinking water source(s) used in the water supply scheme: source name (location):_____

Parameter	Method	Result
Turbidity	Visual comparison	
pH	Strip colour comparison	
Total Hardness	Titrimetric method	
Total Alkalinity	Titrimetric method	
Chloride	Titrimetric method	
Ammonia	Visual colour comparison	
Phosphate	Visual colour comparison	
Residual Chlorine	Visual colour comparison	
Iron	Visual colour comparison	
Nitrate	Visual colour comparison	
Fluoride	Visual colour comparison	
Arsenic (in hotspots)	Visual colour comparison	

Washing / bathing blocks

24. Some poor areas in the village might not have sufficient space to have a washing space and / or a tap connection. Number of such areas identified to have a washing / bathing block:_____

Location name	No. of Households	Population

Source Sustainability

25. In case of groundwater source, is there a borewell recharge structure ? (Y/N)
26. List of existing water bodies in the village that need to be rejuvenated / mainted:

Grey water management:

27. Grey water generated (65% of water supply):_____KLD

No. of HHs with individual soak pits:_____

No. of HHs that need individual soak pits:_____

No. of community soak pits needed:_____

Is there a need for water stabilization pond? (Y/N):_____

If yes, location identified for it:_____

If No, what other grey water management measures to be adopted?_____

V. Water Supply Scheme

27. FHTCs will be provided under which of the following category:

- Retrofitting of ongoing schemes taken up under erstwhile NRDWP for the last mile connectivity
- Retrofitting of completed RWS to make it JJM complaint
- SVS in villages having adequate groundwater/spring water/local or surface water source of prescribed quality
- SVS in villages having adequate groundwater that needs treatment
- MVS with water grids/regional water supply schemes
- Mini solar power based PWS in isolated/tribal hamlets

28. water source identified:_____proposed water supply scheme based on techno-economic and socio-economic appraisal:_____

Land identified for the scheme:_____

Date by when land will be handed over to PHED/RWS Dept:_____ cost of scheme:_____GoI share:_____ State share:_____ community share:_____

Individual household contribution:_____ Annual O&M charges:_____ individual household monthly water tariff/user charge: _____ if any remote habitations, PWS identified:_____

VI. Convergence

(The following table indicates the possible schemes under which activity/fund convergence is possible. Village community is to send proposals to the identified schemes as per village requirements)

29.

Name of the Scheme	Central/State Government Department	Possible activities that can be taken up	Fund proposed
Fourteenth Finance Commission	GP	Grey water management, drainage systems, etc.	
Swachh Bharat Mission – Grameen (SBM-G)	Department of Drinking Water and Sanitation, M/o Jal Sahkti	Grey water management – soak pits (individual/community), waste stabilization ponds, etc.	
MGNREGS	M/o Rural Development	All water conservation activities under Natural Resource Management (NRM) component	
Integrated watershed Management (IWMP)	D/o Land Resources	Watershed management/RWH/ artificial recharge, creation/ augmentation of water bodies, etc.	
Repair, Renovation and Restoration of water bodies	D/o Water Resources, River Development and Ganga Rejuvenation	Restoration of larger water bodies	
Rashtriya Krishi Vikas Yojana (RKVY)	M/o Agriculture, Cooperation and Farmers Welfare	Watershed related works	
Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)	M/o Agriculture, Cooperation and Farmers Welfare	Provision of micro-irrigation for various water-intensive crops to reduce drawl of water from aquifers	
Compensatory Afforestation fund Management and Planning Authority	M/o Environment, Forests and Climate Change	Afforestation, regeneration of forest ecosystem, watershed development, etc.	
Pradhan Mantri Kaushal Vikas Yojana (PMKVY)	M/o Skill Development and Entrepreneurship	Skill development, training, etc. for human resources required for RWS schemes	
Samagra Shiksha	M/o Human Resource Development	Provision of drinking water supply in schools	
Aspirational districts programmes	NITI Aaayog	Water conservation activities on large scale	
District Mineral Development Fund (DMF)	State	Water conservation activities on large scale	

MPLAD	Ministry of Statistics and Programme Implementation (MoSPI)	In-Village infrastructure	
MLALAD	State	In-village infrastructure	
Grants under Article 275(1) of the constitution/ Tribal Sub Scheme (TSS)	Ministry of Tribal Affairs and state	In-village infrastructure	
Donors / sponsors			

Signature of chairperson:_____

Name & signature of PHED / RWS Dept. official:_____

Name & signature of ISA representative (if applicable):_____

Contact Details:

GP and /or its sub-committee, i.e. VWSC/Paani Samiti/User Group, etc. chairperson:

Panchayat Secretary name and phone number:

Barefoot technician name and phone number:

Five women to ensure water quality surveillance, names and phone numbers:

1.

2.

3.

4.

5.

Pump operator name and phone number:

Annexure – I (a)

eGramSwaraj

The Format provided by the Ministry of Panchayati Raj in eGramSwaraj Portal
(https://egramswaraj.gov.in/welcome.do)

Approved GPDP (2020-21):

1. Plan Summary
2. Sectoral View
3. Scheme View
4. Priority Wise Activity Details

1. Plan Summary :

Total Amount Allotted (In Rs.)								Total Planned Outlay (In Rs.)							
Tied				Untied				Tied				untied			
SC	ST	General	Total	SC	ST	General	Total	SC	ST	General	Total	SC	ST	General	Total

2. Sectoral View

Sl.No.	Sector	Planned Outlay							
		Scheme							
		Tied				Untied			
		SC	ST	General	Total	SC	ST	General	Total

3. Scheme View

Sno	Scheme Name	Component Name	Total Amount Allotted (In Rs.)								Total Planned Outlay (In Rs.)							
			Tied				Untied				Tied				untied			
			SC	ST	General	Total	SC	ST	General	Total	SC	ST	General	Total	SC	ST	General	Total

4. Priority Wise Activity Details

SN	Activity Code	Name of Activity	Activity Description	Activity For	Sector	MGNREGA Activity Category	Location of Asset	Estd. Cost	Total Duration	Scheme Name	Gen. Fund	SC	ST

Annexure – II

Check-list of data required for preparing VAP

A Village Action Plan (VAP) will be prepared by Gram Panchayat or its sub-committee, i.e. VWSC/ Paani Samiti/ User Group, etc. with support from ISA, PHED/ RWS Department, DWSM based on PRA, baseline survey, resource mapping and felt needs of the village community. It will include the following:

i. history of water supply/ availability in the village, details of any drought/ scarcity/ cyclone/ flood or any other natural calamity pattern; history of any emergency arrangements like water supply through tankers, trains, etc.; history of part works related to water supply, source strengthening, general trend of water availability, major water-borne diseases;
ii. existing status of village water supply including source, water quality issues, if any, and O&M arrangement;
iii. current availability of water in water source (yield measured) and its long-term sustainability; need assessment of water required in village and the available resources. Based on this, decision to be made for construction of Single Village Scheme (SVS) or part of Multi Village Scheme (MVS);
iv. number of existing FHTCs and number of FHTCs yet to be provided in all habitations;
v. willingness including affordability of people to contribute towards partial capital cost in cash/ kind and/ or labour and regular contribution towards O&M;
vi. capacity building of members of Gram Panchayat and/ or its sub-committee, i.e.VWSC/ Paani Samiti/ User Group, etc., barefoot technicians, awareness generation among community on judicious use of water and change in living standards;
vii. location of proposed water source, washing/ bathing places, cattle trough, finalization of technology option, implementation schedule, long-term O&M plan, etc.;
viii. ensuring availability of land in favour of Gram Panchayat and/ or its sub-committee, i.e. VWSC/ Paani Samiti/ User Group, etc. for construction of in-village water supply infrastructure;
ix. overall roles and responsibility of Gram Panchayat and/ or its sub-committee, i.e.
x. VWSC/ Paani Samiti/ User Group, etc. and its members and linkage with DWSM, SWSM, ISA, agency, PHED/ RWS Department;

xi. plan for providing water to public institutions, viz. school, anganwadi centre, health centre, GP building, etc. in the village;
xii. identify barefoot technician for minimal repair works, O&M, etc.;
xiii. identify dedicated persons in village to conduct water quality tests through Field Test Kits and train for the same;
xiv. grey water management measures;
xv. schedule for sanitary inspection;
xvi. water safety and security plan.

Gram Panchayat and/ or its sub-committee, i.e. VWSC/ Paani Samiti/ User Group, etc. to ensure participation of village community including all its habitations, ISA, DWSM, PHED/ RWS Department., etc. in *Gram Sabha*. The VAP will be approved in the *Gram Sabha*, when 80% of the village community present in the meeting agree to the prepared plan. VAP will then be submitted to DWSM for further action. Technical approval will be accorded by the PHED/ RWS Department/ Board.

Annexure-III

GRAM PANCHAYAT INFORMATION SHEET

Section 1: General information:

1.	State:	District	Block:	GP:	No. of Villages/Habitations:
2.	Current Population:	No. of Households:			No. of Livestock:

Section-2: Information about rural water supply facilities:

1.	Is a piped water supply (PWS) scheme available in the GP?		Yes ☐ No ☐
2.	Are all households in the GP covered by PWS?		Yes ☐ No ☐ If no, no. of households not covered.:
3.	What is the source of PWS?	Tube Well ☐ Open Well ☐ Surface Water ☐ Other	
4.	Is the source of PWS perennial?		Yes ☐ No ☐
5.	Number of other drinking water sources	Hand pump: Open well: Spring/Surface water:	

6.	Is a tanker required in summer?	Yes ☐ No ☐ if yes, then for how many HHs.
7.	Who is responsible for daily operations of PWS in the GP?	GP/VWSC
8.	Does the GP levy water tax?	Yes ☐ No ☐ If yes, annual recovery (per cent):
9.	Is the water tax collected sufficient to maintain water supply facilities?	Yes ☐ No ☐
10.	Has a water person been appointed by the GP?	Yes ☐ No ☐
11.	Is the PWS water chlorinated every day?	Yes ☐ No ☐ If yes, whether chlorination process is done manually or automated
12.	Is OT test done daily?	Yes ☐ No ☐ If yes, is it recorded Yes ☐ No ☐
13.	Is bacteriological testing of drinking water sources done regularly?	Yes ☐ No ☐ If yes, whether the reports are available? Yes ☐ No ☐
14.	Is chemical testing of drinking water sources done regularly?	Yes ☐ No ☐ If yes, whether the reports are available? Yes ☐ No ☐
15.	Is VWSC functional?	Yes ☐ No ☐ If yes, then are VWSC members trained? Yes ☐ No ☐

Section 3: Information about sanitation

1.	Type of toilets in numbers	Single pt:..... Twin pit:..... Septic tanks:.....others:.....
2.	Do all households use toilets regularly?	Yes: ☐ No: ☐ If no, no. of HHs not using toilets:.....
3.	If some households do not use, what are the reasons for that?(provide numbers of households)	Not availability:..... Dysfunctional:..... Mind set:.....
4.	How is greywater managed at the household level in the GP? (mention no. of HHs)	Kitchen gardens:..... Soak pits:... Other:.... Open discharge:..... connected to gutter:.....
5.	Is there a provision for end treatment of liquid waste management facility in the GP?	Yes ☐ No ☐ if yes, then name of the technology used.....
6.	Do all households segregate wet and dry garbage?	Yes ☐ No☐ if no, no. of families.....
7.	Is there a provision for community level end treatment of bio-waste?	Yes ☐ No ☐ if yes, then names of the technologies used.....
8.	Is there a provision for management of inorganic waste(plastic, menstrual waste, menstrual waste)	Yes ☐ No ☐
9.	Is a system for emptying of pit latrines available in the GP?	Yes ☐ No ☐
10.	Is a system for desludging septic tank type latrines available in the GP	Yes ☐ No ☐
11.	Do all anganwadis in the GP have toilet facilities?	Yes ☐ No ☐
12.	Do all schools in the GP have separate toilet facilities for boys and girls?	Yes ☐ No ☐

Sections 4: Institutional arrangements

1.	Have all the GP members received water sanitation related training?	Yes ☐ No ☐ If yes, mention the year of training.....
2.	Is there a source of funding for water and sanitation works in GP?	GP owned funds ☐ 14th FC ☐ CSR ☐ Public contribution ☐
3.	Have provisions for water and sanitation works been made under the GPDP	Yes ☐ No ☐
4.	Have the swachhgrahis been selected?	Yes: ☐ No: ☐ If yes, then no.of swachhgrahis.....
5.	Do all swachhgrahis know their roles and responsibilities in the ODF Plus phase?	Yes ☐ No ☐
6.	Has the GP prepared a community-led action plan for ODF plus?	Yes ☐ No ☐
7.	Does the GP have a grievance redressal system for water supply?	Yes ☐ No ☐

Note: This format can be translated in local languages and contextualized by the states

* Templates is indicative and may be customized as per local need and context

Annexure- IV

MODEL BYLAWS FOR VILLAGE WATER AND SANITATION COMMITTEE

Village water and sanitation committee of .....village Panchayat.....Panchayat union of .....district. Approved by the village Panchayath...../.....20/.....

1. Jurisdiction

1. The jurisdiction of the committee is limited to the villages and hamlets within the village Panchayat.

2. Objectives

1. The Village Water and Sanitation Committee (VWSC) shall assist the Village Panchayat in effective management of water supply and sanitation facilities in the panchayat village as a legal entity recognised by the Gram Sabha.
2. The VWSC shall be a forum for community involvement in water and sanitation issues and provide a link between the Village Panchayat and the users of water and sanitation installation in the panchayat village.

3. Status and constitution

i. The VWSC shall function as a Standing/Statutory Committee for the Village Panchayat. It will have 10 – 15 members.

ii. The VWSC shall include all the members of the Village Panchayat (or) as decided by Gram Sabha but it shall include all the ward members. The VWSC shall also include representatives of the local level formal/informal organisations e.g. Water User Groups-NGOs-Self Help Groups and Governmental Staff like School Teachers and Health Workers as decided by the Grama Sabha.

iii. The Gram Panchayat Secretary (*Patwari / Talati*) shall act as the secretary of the VWSC. It will be headed by the Panchayat President (Sarpanch) /Up-sarpanch / traditional village head / senior village leader as the Gram Sabha may decide. S/he will be the chairperson.

iv. Of the members of the VWSC it shall be ensured that not less than 50% are women and not less than 25% belong to weaker sections such as SC/ST.

v. All the members other than panchayat members shall be selected by the Grama Sabha.

vi. If stand-alone water supply systems are planned in scattered settlements/ habitations, a user group is to be formed in such settlements / habitations. Such groups will draw powers from, and be accountable to VWSC / Paani Samiti as the case may be.

vii. All the members of the VWSC will work purely on a voluntary basis and will not be eligible for any sort of allowance, fees (or) honorarium for working in this committee.

4. The Term

a. Ordinarily, the tenure of VWSC may be kept at 2 – 3 years, unless the Gram Sabha / DWSM feels it must be reconstituted in between for some reason. When the functioning of the VWSC is smooth, the term of VWSC members shall become coterminous only with the term of office of the elected body (the Village Panchayat).

b. In the absence of a Village Panchayat the term of the VWSC shall continue until a new VWSC is constituted by the newly elected Village Panchayat.

c. Individual members can resign from or be appointed to the VWSC after approval by the Grama Sabha during the Term.

5. Power of the Committee.

i. The VWSC shall have powers to take action on behalf of the Village Panchayat relating to Water Supply and Sanitation.

ii. The Village Panchayat shall compile a report on actions taken and recommendations given by the VWSC and apprise the Grama Sabha during its meeting to be held on 15th August; 2nd October; 26th January; 1st May of every year.

iii. The VWSC shall perform duties and functions as described in the Constitution and in By laws representing Water Supply and Sanitation.

iv. The Village Panchayat shall consult the VWSC before effecting any decisions related toWater and Sanitation issues pertaining to the village

v. The VWSC shall have powers to call for any information or documents relating to Water Supply and Sanitation.

vi. The VWSC shall have powers to supervise and monitor all works related to Water Supply and Sanitation.

vii. The VWSC shall have the powers to inspect all water and sanitation facilities and structures affecting the utilisation or functioning of such facilities in the panchayat village.

viii. The VWSC shall have the powers to seek necessary professional advice from any government or private organisation or individual to perform its duties adequately.

6. Roles and Responsibilities of the VWSC

General and administrative responsibilities

The VWSC

i. Shall take responsibility for all assets pertaining to public water and sanitation in the panchayat village.

ii. Shall take responsibility for the management of all public water and sanitation installations in the panchayat village. This includes planning, implementation, operation, maintenance, monitoring, dissemination of information and financial management.

iii. Shall ensure preparation of Village Acton Plan (VAP) for water supply schemes; and help mobilize people for PRA and FGD for situation analysis exercises.

iv. Arrange to provide FHTC to every existing rural HH and any new HH that may emerge in future, and ensure that scattered households located away from main settlements also get FHTCs.

v. Shall assist and support the community motivators and health educators in their activities.

vi. Shall be responsible for motivation and awareness campaign on health and hygiene in the village

vii. Shall guide and collaborate with Water User Groups, ISAs/NGOs, individuals and Self-help Groups, which are active in the water and sanitation sector in the village.

viii. Shall bear the responsibilities for equitable distribution of safe drinking water at all times, and in times of natural calamities such as droughts, floods and epidemics.

ix. Conduct awareness campaign on judicious use of water; come up with mechanisms to ensure no misuse of water and undertake IEC campaigns with the help of ISA / NGOs / Unnat Bharat Abhiayan (UBA) Institutions.

Technical responsibilities

The VWSC

i. Shall undertake responsibility in the operation and maintenance of all public water distribution systems; drainage lines, and influence the solid waste disposal methods to become scientific.

ii. Shall assist the Village Panchayats in construction supervision, purchase of materials, plumbing works and quality control.

iii. Shall conduct regular sanitary surveys of the village.

iv. Shall be responsible for the short-term and long-term protection of drinkingwater sources and the environment in the panchayat village.

v. Shall be responsible for the installation and administration of FHTCs for water supply as per the terms and conditions prescribed in the Bylaws.

vi. Facilitate third party inspection and functionality assessment of WASH facilities.

vii. Facilitate preparation of water budgeting

viii. Ensure water quality testing using Field Testing Kits (FTKs), periodic testing at laboratories & disseminate the same among community and undertake sanitary inspection. Arrange to training, and engage rural youth / students / SHGs to carry out these activities.

ix. Hire/ arrange pump operators, barefoot technicians attend regular repair and maintenance work, and operate the system.

x. Undertake / participate in Social Audit of water supply infrastructure.

Financial responsibilities

The VWSC

a. Shall prepare the budget relating to water and sanitation for inclusion in the budget of the village panchayat.

b. Shall closely monitor the water and sanitation budget of the Village Panchayat.

c. Mobilise and motivate the community to contribute 5% and 10% of in-village infrastructure capital expenditure, as the case may be. The contribution may be in the form of cash and /or kind and / or labour

d. open bank account / use existing account of GP for community contribution and depositing O & M service charge. In case an existing account is being used, it should be ensure that a separate ledger is to be maintained for contribution and incentive.

e. Shall assist the VP in appointing /finding suitable candidates for the post of pump operators, hand pump mechanics, plumbers and other persons required for operation and maintenance of Water Supply systems.

f. Shall see that all taxes, fees and all payments related to the water and sanitation are credited to this account payments related to the O & M of water and sanitation facilities are met from this funds.

g. Shall assist the Village Panchayat in collection of water fees / water service charges as per terms and conditions prescribed in the By-laws.

Roles and Responsibilities of the VWSC in times of natural calamities like drought, flood and epidemics

During drought conditions

The VWSC shall

a. Ensure, adequate protected water supply is made covering the entire panchayat (Inadequate supply of water may lead to, unhygienic conditions and thereby outbreak of epidemics).
b. Take measures for protection of sources from contamination.
c. If groundwater is not available within the panchayat habitations procure or fetch safe water from distant sources through clean and hygienic water tankers and distribute equitably to the community.
d. Ensure adequate regular chlorination of water supplied.
e. Repair the defunct water supply installations like abandoned hand pumps, public fountains etc
f. Shall flush / clean the bore well / tube well sources so far not utilized regularly or properly and put them into beneficial use
g. Restrict the usage of unsafe drinking water sources
h. If power supply is not available make use of the generators for pumping water from the sources
i. Educate the community to use the water wisely avoiding wastage and ensure equitable distribution of safe drinking water.

During floods

The VWSC shall

i. Check whether the water supply distribution main function properly and there is no mixing or intrusion of drainage or contaminated water through leaky joints.
ii. Communicate to the community through public address systems and through social media such as Whatsapp / SMS etc. good public health and hygiene practices.
iii. Procure adequate quantities of bleaching powder and store it safely and regular chlorinating of water.
iv. Protect the water sources from the mixing or entering of contaminated flood water with the water sources.
v. Restrict the usage of or close the flooded, unsafe sources.
vi. Ensure keeping clean public amenities like urinals, toilets etc.

vii. Ensure the school / *anganwadi* latrines are maintained cleanly

viii. Take necessary action - protection measures from the menace from the menace of animals to avoid spreading of diseases

During epidemics

The VWSC shall

i. Check the quality of water in the nearest water quality-testing laboratory and find out if water is safe to drink / any contaminants are in it.

ii. Take immediate remedial actions to prevent contamination. If it is beyond redeemable provide safe water from distant sources.

iii. Check whether the water supply distribution main functions properly and there is no mixing or intrusion of drainage or contaminated water through leaky joints.

iv. Communicate to the community through public address systems / social media the ways and practices for self and public hygiene.

v. Procure adequate quantities of bleaching powder and store it safely for regular chlorinating of water.

vi. In slushy, water stagnant areas spray mosquito repellents or DDT

vii. Get adequate stock of ORS for distribution to the community

viii. Liaise closely with medical expertise and Public Health Department.

ix. Educate the community through mass media like TV, radio, thandora (tom-tom), social media the basic protection measures and simple treatments like boiling, Cooling, Filtering and consumption.

x. Keep public amenities like urinals, toilets clean

xi. Ensure that that the school / *anganwadi* latrines are maintained properly

xii. Take necessary action-protection measures from the menace of animals to avoid spreading of diseases.

7. Meetings

a. The VWSC shall meet at least once in a month

b. The Chairman shall call for the meetings of the committee and maintain the proceedings of the meeting

c. The proceedings of the Committee meeting and the action taken shall be reported in the Grama Sabha.

d. A quorum of the VWSC shall be 50 % of the members.

Annexure - V

MODEL BY LAWS FOR WATER SUPPLY

By law for.....Village Panchayat.....Panchayat Union of.....District.

Approved by the Village Panchayat ...../.....20.....

PART I

GENERAL

1. The jurisdiction of the Bylaw is limited to domestic and non-domestic water supply to the villages and hamlets within the Village Panchayats.
2. These By Laws prepared keeping in view the Constitution of India (Articles 243G, 243H, 243I and 280), the relevant provision of the State Panchayat Acts on the responsibilities and powers of Village Panchayat on water supply and the JJM guidelines.
3. The Village Water and Sanitation Committee(VWSC) is here by appointed Executive Authority and is authorised to manage, operate and maintain the public water supply system within the boundaries of the villages within the Gram Panchayat and to fix terms and rate under which water facilities may be supplied and water used,
4. Water of adequate quantity and quality within the technical and financial capacity of the village panchayat shall be supplied for domestic and non domestic use daily at times and place decided and announced by the VWSC.
5. The rates as set out in Schedule A and Schedule B are here by imposed on water and the rates shall be levied and collected in accordance with the schedules.
6. The rates shall be revised once a year to reflect changes in the cost of delivery of water services.
7. Revenue collected for providing household service connections and water charges shall only be used by the purpose of operation and maintenance and renewal of water supply schemes in the Village Panchayat.

8. Any person who contravenes any provision of the Bylaw commits an offence punishable, and is liable to a fine as stipulated in schedule C of the By law.

PART II

House Service Connections

Application

1. Every application for the FHTC shall be submitted to the Executive Authority in writing signed by the applicant (owner or occupier of the house with the written consent of the owner of the premises.). The applicant shall indicate if the connection is for Domestic or Non-Domestic Purpose.
2. The turn "House" occurring in the Bylaw shall mean building that is assessed as one unit under the House tax.
3. After receiving the application the Executive Authority will investigate and decide whether the capacity of the water supply system allows the connection to be given without unduly affecting the supply of water to existing household service connections / FHTCs. Application shall be considered and approved in the order they are received.
4. After approval of the application for house service connection the work necessary for such supply shall not be commenced until the applicant has remitted to the Executive Authority the estimated service connection fee and the fixed deposit amount as specified in Schedule A.
5. A formal agreement signed by the Applicant and the Executive Authority shall be prepared and a copy of the By-law for Water Supply shall be given to the Applicant.

User category

1. The FHTC shall be either for Domestic or Non-Domestic use.
2. Supply of water in the following places shall be classified as Non-Domestic irrespective of the fact that building is used for the purposes or not.
    i. For any small business like village restaurants / tea stalls
    ii. For government or private institutions

iii. For the purpose of home-based / cottage industries
iv. For the purpose of building constructions
v. For any other mechanical purpose – not meant for drinking
vi. Other than domestic purposes
vii. If the house owner or occupier draws water from the Panchayat pipe supply through hose pipe or movable pip or other device attached to the taps sanctioned for the FHTC.

3. The supply of water to Temples, Mosques and Churches shall be only for drinking purposes and shall be classified as Domestic.
   i. The management of the institutions shall have to pay all the charges incurred for the installation of tap connection and its maintenance.
   ii. If the water supplied for the above said institutions is found to be wasted or used for other purposes. The charges will be collected as for Non-Domestic use.
   iii. If at any time the taps are found leaking. Or mishandled defeating the automatic action. The Executive Authority shall disconnect the tap forth with.

Technical stipulations

1. Every house to which water supply connections pipe is laid, shall be provided with only one service connection from the main (controlled by a "Screw Down" ferrule and a stop cock), which can be used for three faucets inside a house. The flow shall be maintained as 5 litres per minute. No house shall be supplied with water from existing or prospective service connection of any adjoining house or building.
2. The House owner/occupier of the premises shall not have any right to claim FHTC in a particular distribution main. The connection will be given only on the distribution main approved by the Executive Authority.
3. Subject to these by-laws the diameter and the character of the service connection pipes, and the number, size and kind of stop cock or tap, shall in each case, be determined by the Executive Authority having regard to the

pressure available at the "off take" point at the main. The standard service connection shall be 15mm (1/2") service pipe with 10mm (3/9") ferrule.

4. All taps in domestic service shall be of G.I or bronze and "screw" type or any other type approved by the Executive Engineer/PHED / RWS Department. The water supply connection pipe and fittings shall conform to the Indian Standard Specification and as specified by the Executive Authority.
5. No tap of any FHTC shall be in such a position as to render it liable to be submerged by water discharged from it at any time or in a position where the spill (or) waste water can be discharged to the nearest panchayat recharge pit, or drain, by gravitation.
6. The house owner or occupier shall not draw water from the piped supply through any pump or other device or movable pipe attached to the tap sanctioned for domestic or non-domestic connection.

Inspection and examination

1. All tap fittings etc of a house service connection shall be so fixed within, the purview of the Executive Authority easy access, and the owner or occupier of the houses shall afford all faculties for easy inspection by the Executive Authority or other representatives and servants authorized by him. If any resistance is offered, the supply of water shall be stopped.
2. The Executive Authority may remove at any time any pipe or fitting connected with any FHTC for the purpose of examining the condition of such pipes or fittings for rendering repairs. If it is found that the pipes or fittings are defective in any respect the Executive Authority may give notice to the owner (or) occupier of the premises to carry out within a specified time. If the work is not executed within the time specified in the notice or if the defect is likely to cause waste or contamination of water, the Executive Authority may himself execute such works, and shall recover the cost there of from the owner or occupier or stop supply of water to the premises by cutting off the connection.

Further, if on such examination if it is found that there is unauthorized additions or alternations or extension of pipes, taps, fittings or tampering with ferrule etc, the Executive Authority may cut off the service connection after giving 24 hours of notice to the owner or occupier of the premises concerned.

Interference and misuse of water

1. No person not duly authorized by the Executive Authority shall open or in any way interfere with any main or pipe connected with the panchayat water supply. Creation of so-called pit taps cause contamination and collapse of the whole water system. Any person suspected to have done this will be reported to the Police.
2. The Executive Authority reserves to himself/herself the right to cut off after giving 24 hours notice any supply granted for domestic or non-domestic purpose if in his opinion, it is found that the water supplied is being misused. In such case the Village Panchayat shall not be liable for any loss or damage.

Temporary cut off or restrictions of supply

1. The executive Authority reserves the right to cut off after giving seven days notice any supply granted for domestic or non-domestic purposes if in his/her opinion there is any scarcity of water at the source. In such cases, the Panchayat or the Executive Authority shall not be liable for any loss but the deposit shall be repaid if so requested.
2. The Executive Authority reserves to himself/herself the right to cut off after giving 24 hours notice any supply granted for domestic or non-domestic purpose in case of repair works.

Payment for service

1. The supply of water shall be chargeable as laid down in Schedule A irrespective of the number of internal taps, and according to the purpose for which it is used(Domestic or non Domestic) and charged at the rates specified.
2. Water charges shall be paid to the Panchayat monthly in advance.

3. In case of default in the payment of the Water Supply charges before the end of the month the Executive Authority shall have full powers to stop supply of water at any time. The Executive Authority of the Village Panchayat shall not be held responsible for any loss or inconvenience caused to the owner or occupier of house. If the water charges are not remitted in the coming month an amount as specified in Schedule A shall be added towards interest.
4. Payment for all water supply under the terms and conditions laid down in the Bylaw if not paid by the party concerned within the time stipulated shall be recoverable in the same manner as house tax.
5. A reconnection fee as specified in Schedule A will be charged for reconnection in case the supply of water is cut off for non-payment of water bills.
6. The water charges have to be continuously paid. Failure to remit the above water charges due to the Panchayat the amount will be recovered from the deposit amount.
7. Remission for non-use of water may be granted by the Executive Authority for the closure of water supply temporarily. A fee as laid down in Schedule A will be charged for reconnection and cut off in each time.
8. Water from a house service connection given for domestic consumption shall not be utilized for non-domestic purpose without the express permission of the Executive Authority in writing. But if the Executive Authority, has reasons to believe that in any case the water supply under the domestic rate is being used for other than domestic purposes, the owner or the occupiers may be required to pay at non-domestic rate of the services connection as specified in Schedule A from such date as the Executive Authority may notify and in default order for cutting off the supply. The decision of the Executive Officer is final.

Penalty

1. Whoever commits a breach of the above by-laws shall be punishable as laid down in Schedule **C.**

PART III

Public taps and hand pumps

Definition of users services

1. All houses within the village panchayat that have not obtained FHTC/ House Service Connections shall be deemed to be users of public taps or hand pumps.

2. The term "House" occurring in this By-law shall mean a building that is assessed as one unit under the House tax.

Use of services

No person

1. Shall draw water from a public fountain in a vessel of more than 30litres capacity
2. Shall draw water from a public fountain or hand pump for purpose other than domestic
3. Take bath or wash cloths, utensils, vehicles, animals at a public tap or hand pump
4. Shall draw water from a public fountain or hand pump more than once consequently when others are waiting.
5. Suffering from any contagious disease or infective disease shall use any public tap or hand pump.
6. Shall draw water from unauthorised taps, pit taps or broken pipes.
7. Shall draw water from FHTC for construction, gardening or any other purpose.

Interference

No person

1. Not only authorized by the Executive Authority shall interfere with any stand post or hand pump for any purpose whatsoever.
2. Not duly authorized by the Executive Authority shall open or in any way interfere with any main or pipe connected with the water supply. Creation of

so-called pit taps cause contamination and collapse of the whole water system. Any person suspected to have done this will be reported to the Police.

3. Shall wilfully or negligently allow the water from a stand post or public water tap run waste
4. Shall so manipulate a stand post or a public water tap as to secure a continuous flow of water. The person by whose action or for benefit or advantage a continuous flow was so manipulated shall be considered to have violated this by-law.
5. Shall commit any nuisance at a public tap pr a hand pump.
6. Shall wilfully or by neglect cause pollution or contamination of any public water source.
7. Not duly authorised by the Executive Authority in that shall open or in any way interfere with any reservoir, main or pipes or valves or other fittings or cause damage to any stand post, public water tap or hand pump connected with the Panchayat water supply scheme.
8. Shall allow children to play around with a public stand post or hand pump.
9. Shall use a public stand post or a hand pump for tying animals or use the tank as a cowshed.

Payment

1. The supply of water from a public fountain or hand pump shall be chargeable as laid down in Schedule B and charged at the rates specified.
2. Water charges shall be paid in the Panchayat monthly in advance.
3. In case of default in the payment of the water supply charges an amount as specified in Schedule B shall be added.
4. Payment for all water supply under the terms and conditions laid down in the By-laws if not paid within the time stipulated shall be recoverable in the same manner as house tax.
5. Remission for temporary non-use of water may be granted by the Executive Authority.

6. In exceptional cases the Executive Authority has the right to waive or reduce rates for poor individual water users or groups of water users if so decided by Gram Sabha.
7. Whoever commits a breach of the By-law and whoever has the care or custody of any child who commits a breach of the above By-laws or an animal that damages any part of the water supply shall be punishable with a fine in accordance with the rules specified in Schedule C.

SCHEDULE – A

Approved by the Village Water Sanitation Committee _____/_____20_____.

WATER RATES FOR HOUSE SERVICE CONNECTIONS

1. For Domestic use, water rate/month is Rs. /- (minimum Rs.50/-) to be paid monthly in advance to the Panchayat.
2. For Non-Domestic use, water rate/month is Rs /- (minimum double the domestic rate) and to be paid monthly in advance to the Panchayat.
3. The Supply of water to Mosques, Temples and Churches, only for drinking purpose, shall be regulated as Domestic use and water charge to be paid at the rate of Rs. /- (minimum Rs.50/-) per month in advance.
4. In case of late payment of the water rates an additional amount of Rs.10/- will be added for Domestic and Rs. 20/- for Non-Domestic use for every month the payment is delayed.

FHTC SERVICE CONNECTION FEE & DEPOSIT AMOUNT

1. For each House Service Connection (FHTC) for Domestic purpose a deposit amount of Rs.1000/- has to be paid to the Panchayat. Half of the deposit shall be paid before getting the connection sanctioned and half within 6 months after the connection has been made, if the Gram Sabha decided so.
2. For each Service Connection for Non-Domestic purpose a deposit amount of Rs. 2,000/- has to be paid to the Panchayat before getting the connection sanctioned.
3. Service connection fee-worked out towards actual cost for laying pipeline-labour and material charges shall be paid in advance to get the FHTC executed.
4. Delay in payment of the balance deposit in accordance with (1) above will be disconnected from the service without prior notice.
5. Reconnection charges in case of cut off of service for non payment of water supply charges is Rs. 200/-

SCHEDULE – B

Approved by the Village Water and Sanitation Committee_____/_____20_____.

WATER RATES for use of public taps and hand pumps

1. For Domestic use water rate/month is Rs.25/- per house to be paid monthly in advance to the Panchayat
2. In case of late payment of the water rates an additional amount Rs.5/- will be added for every month the payment is delayed.

SCHEDULE – C

Approved by the Village Water and Sanitation Committee_____/_____20_____.

PENALTIES (Fines)

Major offence (wilful and active breach of Bylaw)

1. Breach of the By-law – Rs.500/- fine
2. For repeated breach – Rs.1000/- plus Rs.100/- for each day the breach continues after receipt of notice from the Executive Authority to discontinue such breach.

Minor offence

1. Breach of the By-law – Rs. 100/- fine
2. For repeated breach – Rs.250/- plus Rs.50/- for each day the breach continues after receipt of notice from the Executive Authority to discontinue such breach.

Annexure - VI

Department of Expenditure
OM No:1(2) – dated 7th May, 2003

Generic structure of the DPR

(i) Context/ background: This section should provide a brief description of the sector/ sub-sector, the national priority, strategy and policy framework as well as a brief description of the existing situation.

(ii) Problems to be addressed: This section should elaborate the problems to be addressed through the project/ scheme at the local/ regional/ national level, as the case may be. Evidence regarding the nature and magnitude of the problems should be presented, supported by the baseline data/ surveys/ reports. Clear evidence should be available regarding the nature and magnitude of the problems to be addressed.

(iii) Project Objectives: This section should indicate the Development Objectives proposed to be achieved, ranked in order of importance. The deliverables/ outputs for each Development Objective should be spelt out clearly. This section should also provide a general description of the project.

(iv) Target beneficiaries: There should be clear identification of the target beneficiaries. Stakeholder analysis should be undertaken, including consultation with stakeholders at the _me of project formulation. Options regarding cost sharing and beneficiary participation should be explored and incorporated in the project. Impact of the project on weaker sections of the society, positive or negative, should be assessed and remedial steps suggested in case of adverse impact.

(v) Project strategy: This section should present an analysis of alternative strategies available to achieve the Development Objectives. Reasons for selecting the proposed strategy should be brought out. Involvement of NGOs should be considered. Basis for prioritization of locations should be indicated (where relevant). Options and opportunity for leveraging government funds through public-private partnership must be given priority and explored in depth.

(vi) Legal Framework: This sector should present the legal framework within which the project will be implemented and strengths and weakness of the legal framework in so far as it impacts on achievement of project objectives.

(vii) Environmental impact assessment: Environmental impact assessment should be undertaken, wherever required and measures identified to mitigate adverse impact, if any. Issues relating to land acquisition, diversion of forest land, rehabilitation and resettlement should be addressed in this section.

(viii) On-going initiatives: This section should provide a description of ongoing initiatives and the manner in which duplication will be avoided and synergy created through the proposed project.

(ix) Technology issues: This section should elaborate on technology choices, if any, evaluation of options, as well as the basis for choice of technology for the proposed project.

(x) Management arrangements: Responsibilities of different agencies for project management and implementation should be elaborated. The organization structure at various levels as well as monitoring and coordination arrangements should be spelt out.

(xi) Means of Finance and Project Budget: This section should focus on means of finance, evaluation of options. project budget, cost estimated and phasing of expenditure. Options for cost sharing and cost recover (user charges) should be considered and built into the total project cost. Infrastructure projects may be assessed on the based on the cost of debt finance and tenor of debt. Options for raising funds through private sector participation should be considered and built into project cost.

(xii) Time Frame: This section should indicate the proposed 'Zero' date for commencement and provide a PERT, CPM chart, wherever relevant.

(xiii) Risk analysis: This section should focus on identification and assessment of project risks and how these are proposed to be mitigated. Risk analysis could include legal/ contractual risks, environmental risks, revenue risks, project management risks, regulatory risks, etc.

(xiv) Evaluation: This section should focus on lessons learnt from evaluation of similar projects implemented in the past. Evaluation arrangements for the project, whether concurrent, mid-term or post project should be spelt out. It may be noted that continuation of projects/ schemes from one Plan period to another will not be permissible without an independent, in depth evaluation being undertaken.

(xv) Success criteria: Success criteria to assess whether the Development Objectives have been achieved should be spelt out in measurable terms. Base-line data should be available against which success of the project will be assessed at the end of the project (Impact

assessment). In this regard, it is essential that baseline surveys be undertaken in case of large, beneficiary-oriented projects.

Success criteria for each Deliverable/ Output of the project should also be specified in measurable terms to assess achievement against proximate goals.

(xvi) Financial and economic analysis: Financial and economic analysis of the project may be undertaken where the financial returns are quantifiable. This analysis would generally be required for investment and infrastructure projects, but may not always be feasible for social sector projects where the benefits cannot be easily quantified.

(xvii) Sustainability: Issues relating to sustainability, including stakeholder commitment, operation and maintenance of assets after project completion, and other related issues should be addressed in this section.

Note: Requirements of the EFC/PIB format may also be kept in view while preparing the DPR.

Annexure-VII

FORMAT FOR PREPARATION OF WATER BUDGET

Table 1: Water Availability Chart for Point Sources:

Source no	Type of source	Location	Monsoon				Winter				Summer			
			Number of families using this source	How much water is collected (Liter /day/ family)	Total water availability from the source (Litre/day)	Total water availability in monsoon	Number of families using this source	How much water is collected (Litre/day/family)	Total water availability from the source (litre/day)	Total water availability in winter	Number of families using this source	How much water is collected (litre/day/family)	Total water availability from the source (Litre/ day)	Total water availability in summer
			a	b	a*b=c	c*120	a	b	a*b=c	c*120	a	b	a*b=c	c*120

Table 2: Water Availability Chart of Pumping Sources

Source no	Type of source	Location	Monsoon				Winter				Summer			
			Pump capacity (HP)	Pump discharge (lit/hr).	Pumping hours/day	Total water availability in monsoon	Pump capacity(HP)	Pump discharge (lit/hr.)	Pumping hours/day)	Total water availability in winter	Pump capacity(HP)	Pump discharge (lit/hr.)	Pumping hour/day)	Total water availability in summer
				a	b	a*b*120		a	b	a*b*120		a	b	a*b*120

Calculating Pump discharge
If people are unable to explain the hourly discharge of the pump then the planning team needs to calculate discharge at the pump delivery point at the storage tank using a 10 litre bucket.
10*60/Seconds taken to fill 10 litres bucket =___water discharge /min*60min=____water discharge /hour
Ensure that each member gets adequate time to discuss all the questions. In case of different views on the same question facilitate a discussion so that the group arrives at consensus.

Table 3: Water availability

Source no	**Type of source**	**Location**	**Water availability in litre**		
			Monsoon	Winter	Summer
1					
2					

Table 4: Season-wise water demand

Source no	**Type of source**	**Location**	**Monsoon**			**Winter**			**Summer**		
			Number of families	**Total Population**	**Total water demand**	**Number of families**	**Total Population**	**Total water demand**	**Number of families**	**Total population**	**Total water demand**
1											

Table-5 :Drinking Water Budget

Source no	Type of source	Location	Monsoon			Winter			Summer		
			Water demand	Water availability	Gap	Water demand	Water availability	Gap	Water demand	Water availability	Gap
1											
2											

Table 6: Calculation of water consumption for industry or business

S.No	Type of Industry	Nos	Average daily requirement in litres	No of days/year of industry or business working	Total water requirement in litres
1.	Livestock				
2.	Hotel				
3.	Company				
4.	Factory				
5.	Others				
	Total				

Note: - It is important to discuss details of hotel, company, factory, and other such business activities prevailing in the village.
*Temperature is indicative and may be customized as per local need and context

Annexure-VIII

FORMAT FOR PREPARATION OF WATER TARIFF BUDGET

S.NO	Details	Expenditure Details	Estimated Expenditure
A	**Operations Expenditure**		
1.	Water staff expenditure Or The agency charges agreed as per agreement in the case of SHGs/ Cooperatives taking care of O&M	No of staff * Monthly salary*12 months	Rs.....
2.	Solar maintenance Agency charges as per agreement or Electricity bill Units used* Pumping Hours*0.**(rate) Note:-This rate shall be updated every year by the respective districts O*M Cell.	a. Annual fixed expenditure depending upon pump HP=Pump HP*(Rate./HP/Month)* 12months	Rs.....
		b. Annual expenditure depending upon unit consumption = annual unit consumption * Rate/Unit)	
		Subtotal of (2) = sum of (a+b)	
3.	Chemicals: TCL powder Note: Depending on daily water use, Calculation based on 5g of TCL Powder for 1000 litre water. Total expenditure of TCL should be calculated on the basis of regular dosing, usage in tank cleaning, water channels, WTP structures and other cleaning.	Annual expenditure on TCL = Total required quantity of powder * Rate/kg	Rs.....
4.	Water sample testing charges Sample conveyance charges	a. Bacteriological tests= No. Of samples per year* rate/sample b. Chemical test = No of sample/ year* rate/sample	Rs.....
5.	Office expenditure (stationery, log books, miscellaneous	Monthly expenditure* 12 months	Rs.....
	Operation cost (1+2+3+4+5)	Total of A	Rs.....

B.	**M&R expenditures**		
6.	Routine M&R (for pipe line leakage repairing, valve repairing, pump motor repairing, tap repairing , colouring, etc.. , miscellaneous expenditure)	M&R = capital cost of water supply scheme*1.5%	Rs.....
7.	M&R expenditure for water sources Note: - According to DSR/State Government approved rates. However, consider the rates as per actual rates in respective locations/villages.	a. Hand pump M&R expenditure= No. of hand pumps* annual maintenance cost	Rs.....
		b. Bore well M&R expenditure = No of bore wells* annual maintenance cost	Rs.....
		c. Open well M&R expenditure= No of wells * annual maintenance cost	Rs.....
		Subtotal (7) = sum of (a+b+c)	
8.	Reverse fund for any major repairs	Reserve fund = 20 percent of the sum of (1 to 7)	Rs.....
	Total M&R expenditures	Total of B = sum of (6,7& 8)	Rs.....
9.	Total operation and M&R expenditure	Total (A+B)	Rs.....
C	**Income**		**Estimated Income**
10.	The gram panchayat's contribution (through various sources-State specific O&M provisions, XIV FC, Own sources etc.)	To be decided by the gram panchayat	Rs.....
11.	Contribution to be collected from users	Total expenditure (row 9) – gram panchayat contribution (row 10)	Rs.....
12.	Assuming 90 per cent as billing efficiency And 80 per cent recovery of water tariff from the billed amount	Water tariff collection = (community contribution as per row 11)*(1/0.9)/(1/0.8)	Rs.....
13.	Water tariff rate	Total water tariff collection as per row 12/ number of consumers	Rs.....

*** Templates is indicative and may be customized as per local need and context**

Annexure - IX

FORMAT FOR ASSESSEMENT OF WATER SUPPLY FACILITIES

General information of the village

Name of the village.....	Name of GP.....
Block.....	District.....
Population (2011 census).....	Male.....Female.....
Total No of HHS.....	Total No of water sources.....
Hand Pumps.....Wells.....Bore wells.....	

Checklist- Assessment of hand pumps

S.NO	Checklist	.....Hand pump no.		.....Hand pump no.	
		Status	**Issues**	**Status**	**Issues**
1.	Is the platform of hand pump in good condition?	Yes/No		Yes/No	
2.	Is there a proposed arrangement to dispose of wastewater around the hand pump?	Yes/No		Yes/No	
3.	Is there any problem in the functioning of the handle?	Yes/No		Yes/No	
4.	Is the water from the hand pump sufficient for the entire year?	Yes/No		Yes/No	
5.	Is there scope for water recharge?	Yes/No		Yes/No	
6.	Is the water of the hand pump potable?	Yes/No		Yes/No	
7.	Is the surrounding of the hand pump clean?	Yes/No		Yes/No	
8.	Has the chlorination of hand pump been done?	Yes/No		Yes/No	
9.	Is the source affected by arsenic?	Yes/No		Yes/No	
10.	If yes, has an arsenic removal plant been installed?	Yes/No		Yes/No	
11.	Is the plant functional?	Yes/No		Yes/No	
12.	Is the filter media regularly replaced or washed?	Yes/No		Yes/No	

Note: All hand pumps will be assessed in the same format. If the private hand pumps at the household levels are more, then 5 hand pumps near the public hand pump should be assessed.

Issues identified

Suggested solutions

Checklist: Piped water supply system

No.	Checklist	Present	Issues
I.Source (PWSS Well)			
1.	Is sufficient water available in the source	Yes/No	
2.	Is the well-silted?	Yes/No	
3.	Is there scope for source strengthening?	Yes/No	
4.	Is the well/ parapet in good condition?	Yes/No	
5.	Is the water of the well in potable?	Yes/No	
6.	Is the surrounding area of the source clean?	Yes/No	
II. Mini water supply scheme- bore well/tube well (if electric pump is fixed on a bore well)			
7.	Is the water of the bore well sufficient throughout the year?	Yes/No	
8.	Is there a scope for strengthening of the bore well?	Yes/No	
9.	Is the surrounding area of the source clean?	Yes/No	
10.	Is the water of the bore well is potable?	Yes/No	
11.	Does the bore well discharge water according to its capacity?	Yes/No	
12.	Is the panel box of the bore well in good condition?	Yes/No	
III Pumping machinery -PWSS			
13.	Does the pump lift water as per its capacity?	Yes/No	
14.	Is a stand-by pump provided Is the pumping logbook up-to-date?	Yes/No	

15.	Is the machinery shaking and making noise when operating?	Yes/No		
16.	Does the pump lift water as per its capacity?	Yes/No		
IV Pump house				
17.	Is the pump house in a good condition?	Yes/No		
18.	Is the electrification in good condition?	Yes/No		
19.	Is the earthling in good working order?	Yes/No		
V Rising main (from pump to storage tank)				
20.	Is there a leakage in the rising main?	Yes/No		
21.	Are there any tap connections from the rising mains?	Yes/No		
22.	Are the valves on the rising main functioning?	Yes/No		
VI Storage tank				
23.	Are there leakages in the storage tank?	Yes/No		
24.	Is there is a proper lid?	Yes/No		
25.	Is there a system of ladder inside and outside of the storage tank and is it in good condition?	Yes/No		
26.	Are there leakages in the valves near storage tank?	Yes/No		
27.	Is there a fencing around storage tank?	Yes/No		
28.	Is the storage tank cleaned at least once a month?	Yes/No		
VII Community purification plant(arsenic removal)				
29.	Is the purification plant functional?	Yes/No		

30.	Has the filter media been replaced or washed?	Yes/No	How Frequently....?
31.	Does the VWSC maintain the plant in its breakdown?	Yes/No	
VIII Distribution network			
32.	Is there a proper zoning system at the village level for equal distribution of water?	Yes/No	
33.	Are there leakages in the distribution line and in the valves fitted to distribution line?	Yes/No	
34.	Are there taps fixed to stand posts and private connections?	Yes/No	
XI Financial management			
35.	Has the annual water supply budget been prepared?	Yes/No	
36.	Was 100 percent of the water tax collected last year?	Yes/No	
37.	Is the current water tax rate adequate?	Yes/No	
XI Institutional Management			
38.	Has the VWSC been formed in the village?	Yes/No	
39.	Has the training of VWSC been organized?	Yes/No	
40.	Has a water person been appointed in the village?	Yes/No	
41.	Has the training on water quality and O&M been organized for the water person?	Yes/No	
42.	Is the grievance redressal system in place in village?	Yes/No	
43.	Is an O&M kit for the water person available in the village?	Yes/No	

Issues identified.....

Suggested solutions.....

* Template is indicative and may be customized as per local need and context

Annexure- X

FORMAT FOR WATER QUALITY ASSESSMENT

General information of the village

Name of the village..... Name of GP.....

Block.....
District.....

Population (2011 census).....Male.....Female.....

Total No of HHS.....Total No of water sources.....

Hand pumps.....Wells.....Bore wells.....

Checklist	Status	Issues
I)Water quality monitoring		
Is chlorination of water done regularly?		
Is the record of chlorination maintained?	Yes/No	
Is TCL powder properly stored in an air tight container?	Yes/No	
Are OT tests conducted and findings recorded regularly?	Yes/No	
Is mother solution distributed to families as per requirement?	Yes/No	
Is alum used for drinking water at the household level during rainy season?	Yes/No	
II) Water testing		
1) Has the priority for water sources been decided?	Yes/No	
2) Is water regularly tested for chemical and biological contamination?	Yes/No	
3) Is water quality test report available in the GP office?	Yes/No	

4) Have proper steps been taken to prevent water pollution?	Yes/No	
A. Cleanliness around water source		
1) Are the surroundings of the water source clean?	Yes/No	
2) Is the waste water stagnated near the source?	Yes/No	
3) Are there individual/community toilets at distance of 10 m from the water source? If not, then have any steps been taken to address it?	Yes/No	
4) Is the garbage stored near the water source?	Yes/No	
5) Are clothes, utensils and animals washed around the water source?	Yes/No	

Note: If the issues persist in the village then note them separately in the column provided in the checklist for issues

1. Issues.....

2. Solutions.....

* Template is indicative and may be customized as per local need and context

Annexure -XI

FORMAT FOR HOUSEHOLD LEVEL ASSESSMENT OF WATER AND ODF PLUS

Household level sanitation survey proforma(A)

S NO	Head of family	Caste/ Category	No. of family members	Availability of toilet			If yes, type of toilet			Total Usage (members)			Soak pit for toilet with soak pit		Filled		Liquid waste management			
				Usable	Defunct	No	1 Pit	2 Pit	Septic	All	Few	No body	Yes	No	Yes	No	Kitchen garden	Soak pit	Open drain	Open
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	Total																			

Household level sanitation survey proforma (B)

Solid waste management			Management of drinking water								Water for y=use		Use of soap for hand washing			General sanitation		
Compost pit nearby HH	Compost pit in own land	Compost pit in public land	Storage		Handling		Usage		Filtration		Yes	No	All member	Few Member	No body	Best	Good	Bad
			Yes	No	Yes	No	Yes	No	Yes	No								
22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

*** Template is indicative and may be customized as per local need and context**

Annexure - XII

FORMAT FOR INSTITUTIONAL LEVEL ASSESSMENT OF WATER AND ODF PLUS

1 Institutional (school) sanitation survey proforma (A)

Sn	School name	Type of school (Pri/Sec	No of Students			Availability of toilet(numbers)									Drinking water facility		
			Boys	Girls	Total	Boys			Girls			Handicapped			In premises	Outside premises	No facility
						Usable	Defunct	Additional required	Usable	Defunct	Additional required	Usable	Defunct	Additional required			
	Total																

Sn	School name	Type of school (Pri/Sec	No of Students			Availability of toilet(numbers)									Drinking water facility		
			Boys	Girls	Total	Boys			Girls			Handicapped			In premises	Outside premises	No facility
						Usable	Defunct	Additional required	Usable	Defunct	Additional required	Usable	Defunct	Additional required			
	Total																

2. Institutional (School) sanitation survey proforma (B)

Sn	School name	Solid waste management			Liquid waste management				Place for hand washing			Menstrual health management		
		Compost pit in area	Public compost pit	No facility	Soak pit	Kitchen garden	Publicly managed	No facility	No. of taps	Water available	Requirement of new taps	Sanitary pads	Changing room	Disposal facility
	Total													

3. Institutional (anganwadi) sanitation survey proforma

S NO	Name of anganwadi	Number of students			Toilet			Baby Friendly		Water for drinking		Hand wash facility with water			Liquid waste management facility		Solid waste management facility	
		Boys	Girls	Total	Usable	Defunct	No	Yes	No	Yes	No	Defunct	Yes	No	Yes	No	Yes	No
	Total																	

4. Institutional (health centre) sanitation survey proforma

S NO	Name of health centre	Toilet facility			Hand wash facility with water		Drinking water facility		Liquid waste management		Solid waste management		Biomedical waste disposal facility		Menstrual health management facility	
		Usable	Defunct	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
	Total															

5. Institutional (GP office and other institutions) sanitation survey proforma

SNO	Name of the institution	Toilet			Drinking water facility		Hand washing facility with water			Liquid waste management		Solid waste management	
		Usable	Defunct	No facility	Yes	No	Defunct	No	In premises	Yes	No	Yes	No
	Total												

*** Template is indicative and may be customized as per local need and context**

Annexure - XIII

Model Template for Action Plan Preparation for Utilization of Tied grants of 15th FC Funds

Sl.No.	Activity	Est. Cost	15th FC	Other Funds	Implementation Responsibility	Time line for completion
1.Preparatory activities						
1.1	Formation of VWSC	**Nil**	-			
2. Source Sustainability						
2.1	Cost of rain water harvesting recharge works					
3 Provision of Household water Tap connections						
3.1	Cost for household tap connections in uncovered area					
4.Operation & maintenance (O&M) of water supply facilities						
4.2	O&M cost of drinking water facilities (Pipe line / public taps)					
5 Water Quality Monitoring and Surveillance						
5.1	Cost for Source protection / maintenance					
5.2	Cost for Disinfection of water					
5.3	Cost for Water quality testing					
5.4	IEC on water quality and safe practice					
6 ODF Household level toilets						
6.1	Repairs of dysfunctional toilets					
6.2	Retrofitting of toilets					
6.3	Cost of O&M of community toilets					

7. ODF Institutional toilets						
7.1	Repairs of dysfunctional toilets					
7.2	IEC for use of toilets					
8. Solid Waste Management (SWM)						
8.1	Cost of adopting suitable technology for SWM					
8.2	Cost of Compost pit units					
8.3	Cost Biogas units					
8.4	Cost of Vermin compost pit					
8.5	Cost IEC and adoption of technology for plastic waste management					
9 Liquid Waste Management (LWM)						
9.1	Identification suitable technology for LWM					
9.2	Cost of Soakpits onstruction					
9.3	Cost of Stabilization ponds					

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