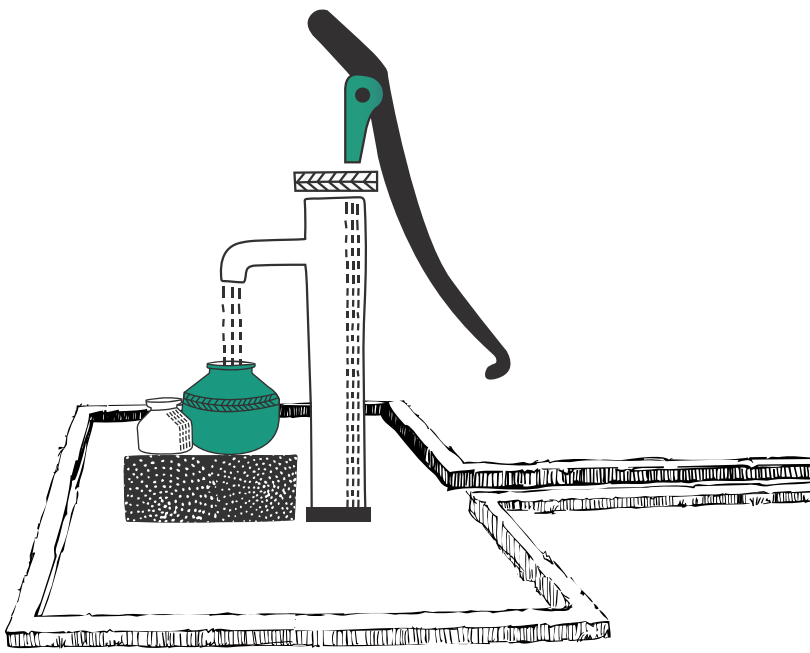
Atal Bhujal Yojana

Framework and Approach
for Capacity Building 2020



Atal Bhujal Yojana

Framework and Approach
for Capacity Building 2020

Abbreviations

CBO	Community Based Organizations
CRP	Community Resource Person
DIP	District Implementation Partner
DLI	Disbursement Linked Indicators
DPMU	District Program Management Unit
GDP	Gross Domestic Product
GoI	Government of India
GP	Gram Panchayat
IEC	Information, Education, and Communication
M&E	Monitoring and Evaluation
MIS	Management Information System
NPMU	National Program Management Unit
O&M	Operations and Maintenance
PGWM	Participatory Ground Water Management
PRA	Participatory Rural Appraisal
SPMU	State Program Management Unit
VWSC	Village Water and Sanitation Committee
WMC	Water Management Committee
WSP	Water Security Plan

Contents

Executive Summary

India is a rising global economic powerhouse. Targeting GDP growth rates at 7.5 percent and hosting a population of over 1.3 billion people, such growth aspirations present complex challenges. One such pressing challenge is balancing development needs with natural resource management.

Water is a critical resource for sustenance, ecological balance, livelihoods, development, and economic growth, and deserves the attention of every nation and its citizens. India is increasing its reliance on the availability of clean and safe water as it energises its economy and elevates its aspirations to ensure the wellbeing and prosperity of its people. A number of initiatives have been launched at the National and State levels to improve the way we protect, manage, and harness water resources across the country. It is now time to strengthen government and non-government institutions as well as citizen groups that are committed to the cause, so as to catalyse a movement to outpace the rapidly escalating water challenge faced by communities across the country. It is also time to consider ways to empower citizens and community leaders across the country with the information and ability to engage, demand, and participate in efforts to achieve a water secure future.

Our ability to harness this common pool and finite natural resource depends largely on our ability to understand, conserve, manage, and continually enhance our efforts to optimise the way we use it. We need to plan and meet an increasingly diverse set of needs powering the nation.

The Department of Water Resources, RD & GR, Ministry of Jal Shakti has undertaken the implementation of Atal Bhujal Yojana (Atal Jal)- a first-of-its-kind, landmark initiative specifically focused on groundwater management. In India, this becomes extremely relevant in view of the fact that groundwater serves as the primary source of water for drinking, domestic use, and agriculture, especially for rural and underserved communities. The primary objectives of the program are:

- To improve the management of groundwater resources in identified water stressed areas of the select States by strengthening the institutional framework for participatory groundwater management;
- To demonstrate community-led sustainable groundwater management which can be taken to scale;
- To strengthen the ability of all parties and stakeholders (communities, resource organisations, professionals, institutions/agencies) across the spectrum to amplify impact for the communities they serve.

Community led sustainable groundwater management puts focus on strengthening local institutions and building capacities in the communities. The framework and approach document developed in consultation with the States outlines the vision and principles that would guide the program's capability building approach during the Scheme lifecycle. This is a living document and would constantly be revised and updated from the inputs and experiences gained during the scheme implementation.

01

Background

In the last few decades, groundwater governance and management have been receiving increased attention in government policies and programs, both at the Centre and State levels. This is, in part, a response to rapidly growing water stress in many parts of the country.

Picture: India Waterportal

The draft National Water Framework Law and the draft Model Groundwater Bill have been revised to provide States with a template for regulation of groundwater. The Central Groundwater Authority (CGWA) was established in 1997 to regulate and control groundwater development with a view to preserving and protecting this resource.

The Constitution of India vests significant powers to Panchayati Raj Institutions (PRIs) (at District, Block, and Gram Panchayats or GP level) and urban bodies to deal with issues related to both surface and groundwater. The GPs are responsible for planning economic development and overseeing implementation of investments at the village/community level. However, inadequate resources, subject expertise, and support, limit the ability of these institutions to engage with programs.

In recent years, many Ministries in other sectors have also issued mandates relevant to groundwater management. Notable amongst them are the Ministries of Agriculture, Energy, and Rural Development. The Union government has been supporting groundwater management through the Groundwater Management and Regulation (GWMR) Scheme, which includes the National Aquifer Mapping and Management (NAQUIM) Programme.

Other notable initiatives include the National Hydrology Project (NHP), the Neeranchal National Watershed Project (NNWP) etc. There are other programs such as the Pradhan Mantri Krishi Sinchayee Yojna (PMKSY), Mahatma Gandhi National Rural Employment Guarantee Act 2005 (MGNREGA), Participatory Irrigation Management (PIM), Command Area Development Programme (CADP) that look at various aspects of water management.

Since water is a State subject, many states have designed their own flagship programs on water such as Mukhyamantri Jal Swavlamban Abhiyan (MJSA) in Rajasthan, Project on Climate Resilient Agriculture (PoCRA) in Maharashtra, Sujalam Suphalam and Water Conservation Projects in Gujarat, among others.

In addition, there have been some promising experiences in participatory groundwater management (PGWM) where civil society organisations have worked with various state governments and communities. These include initiatives such as the Andhra Pradesh Farmer Managed Groundwater System (APFAMGS), Managed Aquifer Recharge through Village level Intervention (MARVI) in Rajasthan and Gujarat, Apna Talab Abhiyan in Bundelkhand area of Madhya Pradesh and Uttar Pradesh, Pani Foundation in Maharashtra and

a large scale community led initiative implemented by Gujarat's Water Supply and Sanitation Management Organization (WASMO).

These pilot initiatives have shown how demand and utilisation for groundwater can be optimised and its sustainability improved if timely information on groundwater conditions is made available, communities are engaged and empowered in the planning process, and multiple agencies work together.

Table 1:
Areas of Improvement from pilot initiatives in groundwater

Typical Program	Lessons from experiences of pilot initiatives
Water Security Plans often focus on supply-side interventions but do not understand availability of the resource and how to optimise its use to ensure best outcomes for the communities in the long-term and the resource itself.	**Demand Management** requires a paradigm shift from conventional supply side interventions to both technological and behavioural changes. Training of the Community Resource Persons (CRPs) and capacity building of the community was the centre of the demand management strategy. Demystification of the resource and understanding the science behind groundwater can increase long-term ownership.
Water Security Plan preparation is done by experts as a **one-time exercise** during the lifetime of a program.	While **Participatory Water Security Plans (WSPs),** facilitated by resource organizations, **created a cadre of local experts** which were available even after the scheme was vital along with building the ownership of the community for **sustainability**. The local experts need to have livelihood opportunities for them to remain involved and help the communities.
High-intensity training in the beginning of the project and minimal follow-up during the planning and implementation phase is a typical practice. CRPs[1] need support primarily during field work. At that time, they find it difficult to reach out to and get help from experts. They have to find their own answers for technical as well as social and procedural issues they encounter.	It takes **30-40 interactions with the CRPs and community** to create participatory water security plans. Experts being available to CRPs to enable these interactions increased the efficacy of the CRPs and helped them solve problems faced during Scheme implementation.
Every program typically spends the initial period collecting data from the ground. It is usually done by the program functionaries without involving the community and is not available to the community for decision- making.	**Trusted verifiable data collected with community participation** that quantifies water reserves and makes it transparent plays an important role in effective demand management. Making this data current and updated is important for the sustainability of the scheme. The scheme can get off the ground faster if it leverages this trusted data as a base.

[1] Community Resource Person: Across the country, they are called Bhujal Jankars, Dhara Sevaks, Jal Surakshaks, amongst others.

02

Atal Jal Charter

Atal Bhujal Yojana is the Government's response to the complex challenges of groundwater management in India. It emphasises the need of a comprehensive collaborative approach across all the stakeholders for groundwater management.

The Government of India (GoI) and World Bank formulated the Atal Bhujal Yojana with an outlay of Rs. 6000 Cr over a period of five years (FY 2020/21 – FY2024/25). Click here to read more about the Scheme.

This Scheme nudges selected states viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh to apply improved planning and implementation of investments in groundwater management in select water stressed areas (79 districts, 222 Blocks / taluks and 9006 Gram Panchayats).

Key objectives of Atal Jal include strengthening of institutions dealing with groundwater management at all levels in the States; encouraging convergence of ongoing schemes for improving ground water conditions through various interventions; and improving efficiency of water use. . These objectives are likely to improve groundwater regimes required for agriculture, domestic, and industrial purposes, thereby generating societal benefit. Atal Jal strives to achieve this by addressing key limitations with respect to policy, regulatory frameworks, knowledge, investments, and institutional capacity for improved groundwater measurement and management. The program incentivises demand side measures, convergence of ongoing schemes and improved groundwater data availability, sharing, and use. In fact, the program recommends a balanced implementation of both supply and demand-side measures taking into account diverse contexts and existing interventions as well as infrastructure in select States. It is anchored in community led planning and groundwater management. The Scheme's charter puts forward a strong argument - that reversing groundwater overexploitation and degradation for an ecologically sustainable future is in the hands of hundreds of millions of individuals and communities. They need the right incentives, information, support, and resources to move to more sustainable development and management of groundwater resources.

The Scheme puts the community at the centre which can only be achieved if local institutions are strengthened and capacities are built at the village level. One could argue that the main focus of Atal Bhujal Yojana itself is "building capacities" of the communities to incentivise them towards this new paradigm and sustain results obtained as a part of the Scheme . To sustain the outcomes achieved by the program, attitudinal and behavioral changes in the community are crucial, making IEC and capacity building the most important aspects of the program.

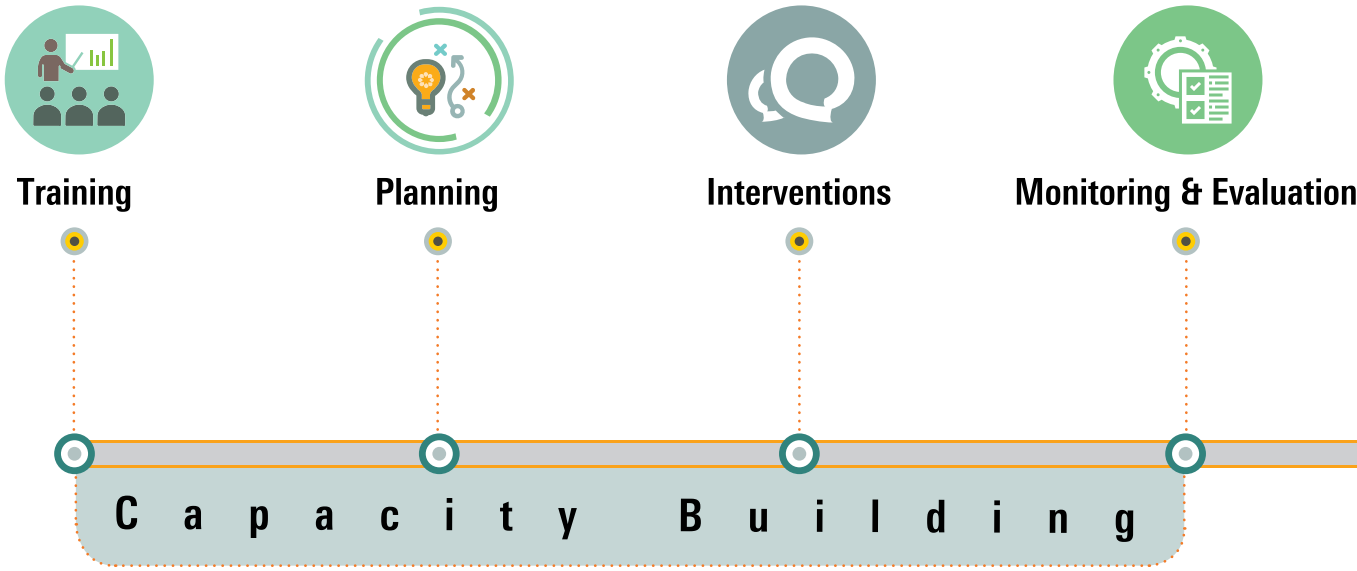
In the process of building capacities it would also be important to include gender sensitive terminology from the beginning. As it is fundamental for the project to have equal participation of diverse gender groups during community engagement activities.

While earlier programs on participatory groundwater management have worked at a scale of few gram panchayats and blocks, the building of capacities communities at large scale, as envisaged in the Scheme will require taking these learnings and applying design principles for scale implementation. Only then the scheme outcomes will be achieved. To strengthen the capacities and groundwater governance mechanism in the participating States, a budget of Rs.1400 crores has been allocated by the Government of India under Atal Bhujal Yojana .

03

Capability Building Aspirations of Atal Jal

As discussed above, the charter of Atal Jal is unique. Demonstrating community-led sustainable groundwater management, at scale, requires a radically different approach. The strategy and implementation of Atal Jal should leverage what exists while envisaging new pathways to build the capacities of the stakeholders at various levels.



Fundamental to Atal Jal's strategy is the belief that capacity building is not a phase that is performed at the beginning of the scheme. It should rather be a continuous activity throughout the program lifecycle steered by the vision and guiding principles of Atal Jal. Capacities need to be built throughout the scheme and it is foundational for all aspects of the program, right from training through planning, implementation to M&E, and impact evaluation.

It is also realised that the means and mechanisms of training have changed significantly since the earlier programs. Mobile phones and data networks have become more prevalent and pervasive, thus empowering and enabling the communities. The scheme envisages to leverage mobile and digital networks to reach, connect, enable, and empower the communities and other stakeholders.

The scheme provides an opportunity to all stakeholders , especially the National Program Management Unit (NPMU) and State Program Management Units (SPMUs), to design, build, and implement the training initiatives in a manner that surpasses the traditional ways of building capacities. The scheme will create space to unlearn before acquiring new learnings, this ensures fresh learning is imparted effectively without any prejudice.

The scheme envisages to have a lasting legacy that will serve as a model for sustainable community-led groundwater management at scale. Future programs and schemes must be able to leverage the capabilities built by Atal Jal. This should retain expertise and build livelihood opportunities for skilled professionals in the water sector. The scheme also envisions leaving behind assets in the ecosystem[2], including - people, content, data, documents, templates and plans which can enable and empower the communities involved in the future programs. This is a call-to-action to make a difference in the quest for water security in all the water stressed areas of the country and help communities elevate their aspirations by ensuring

[2] Ecosystem refers to the programs, organizations and individuals working on groundwater and water security in the country.

04

Capability Building for Atal Jal

Vision of Capability Building

To build capacities of stakeholders at all levels to realise the outcomes of Atal Jal with a focus on empowerment of community, frontline functionaries, and Gram Panchayats for sustainable water management.

Objectives of Capability Building Strategy

All stakeholders associated with scheme (with a specific focus on GP level functionaries):

- Have acquired necessary knowledge and skills to improve the management of groundwater resources;
- Have utilized their newly acquired knowledge/skills to ensure quality of outcomes leading to sustained water management;
- Are skilled and possess proof of knowledge acquisition and can access livelihood opportunities by being available beyond this scheme; and
- Leave behind the outputs of capability building such as skilled people, practice based content, trusted data and artefacts (such as plans, reports etc.) as assets that can be utilised beyond the scheme .

Guiding Principles and Activities for Capability Building

Based on the program guidelines of Atal Bhujal Yojana, consultations with the states and lessons from the ground, five underlying principles for the capability building strategy of the scheme have been identified. Steps and activities for operationalisation of each of these principles have also been listed.

1
Focus on building the capacities at the GP Level

The focus of capability building should be to look at the scheme from the lens of the community. The capacity building plan must empower them; institutionalize and build the right capabilities through all the phases–planning, funding, implementation, operations, and maintenance (O&M) at the GP level.

Activities under Atal Jal Scheme:

- Water Management Committee (WMC)/ Village Water and Sanitation Committee (VWSC) is seen as the driver of community participation in the scheme with hand-holding support from the District Implementation Partner (DIP) and the District Program Management Unit (DPMU) . The Scheme will create trained practitioners who will collect groundwater level, rainfall, and water quality related data in their GPs; help in creating the water budgets and WSP and update them on a regular basis. They will be trained to make sense of the data from a GP perspective and to take the insights to the community. These trained practitioners are the key to community ownership and sustainable outcomes of the scheme.

- The scheme will leverage and build upon the existing capacities from the Jal Jeevan and Swachh Bharat missions.
- The scheme will create incentives to sustainably engage these trained practitioners.

Atal Jal encourages State program Management Units (SPMUs) to identify the experts who have experience in building capacities at the GP and community levels and leverage them in designing and implementing their own capacity building plan. Capacity building support should go beyond a "training alone" approach to include hand-holding support; institution development; enabling policy support; regular monitoring and review; facilitating innovations/ experimentation; interactions with experienced persons; exposure visits to successful projects sites; many-to-many conversations between peers and so on.

2
Increasing the number of interactions

While implementing the scheme, the practitioners on the ground face several challenges,– technical impediments to ensure optimal groundwater management; social and cultural impediments, and procedural impediments while accessing the block and district level functionaries. Resolving these issues in a timely manner and unblocking them is important to achieve the scheme outcomes within the desired timelines. For example, experience suggests that at least 30-40 interactions are needed between the experts and the community to successfully prepare a WSP and implement it. Thus, to prepare all the WSPs for Atal Jal more than 11,50,000 interactions over 5 years will be required.

Activities under Atal Jal Scheme:

- The scheme will ensure that it provides all stakeholders space to reach out, to resolve technical, social and procedural issues on a regular basis through a common platform so that appropriate hand-holding support is provided. These interactions will be conducted to enable many-to-many sharing of challenges and solutions to help solve multiple people's problems together and also enable peer learning.
- The scheme will create mechanisms to ensure that the program functionaries at all levels and especially the GP level are provided inputs at regular intervals (a minimum of 1 interaction per week) and experts and expertise are made available to the functionaries to resolve bottlenecks and move forward as they perform the tasks on the ground. A virtual support system is expected to be developed for all cadres of trainers & practitioners using a hub-and-spoke model[3], wherein the trainers and practitioners have the access to a central hub of experts for solving any issues or clarifications.
- The scheme will perform continuous evaluation of the effectiveness of capacity building at different levels and take necessary actions to fill in the gaps in understanding and practice of the individual participants.
- Atal Jal will try to go beyond classroom training and conventional physical interactions. This will be done by leveraging virtual interactions through online meeting tools, wherever possible at regular intervals between the frontline workers, experts, and the government functionaries.

3
Demand-led and not supply-driven

The current mode of cascaded capacity building looks at the scheme from the trainers' vantage point. There is a need to flip the model and look at capacity building from the trainees' viewpoint to enable them to act on what is required to ensure water security at the ground level. Need-based and continuous capacity building inputs will take the learners as equal stakeholders throughout the lifecycle of the scheme.

Activities under Atal Jal Scheme:

- Frequent interactions discussed above will help the scheme to understand the support required and provide inputs based on the demand from the practitioners .
- The capacity building modules and content will also be made available to the practitioners to help them consume and learn on demand.

4
Sustainability: Leaving behind assets

The scheme emphasizes **sustainable groundwater management** as the ultimate goal. Sustainable groundwater management can only be achieved when the communities are empowered with assets which can be accessed and leveraged beyond the program period. To ensure water security beyond the program, the capability building efforts

[3] "Hub & Spoke" model - wherein the Mentor Institution, called the "Hub" is centralized and will have the responsibility of guiding the Mentee institution through the secondary branches the "Spoke" through the services provided to the mentee for self improvement. It is already in use, across many programs of the Govt. of India. Click here to read more.

will leave behind assets in the form of skilled people, practice-based knowledge and content, trusted data, and artefacts.

Activities under Atal Jal Scheme:

- **Leave behind skilled people who are discoverable for the ecosystem.** The scheme will make people who are being trained, visible so that the right people for the right jobs can be leveraged in the right place. PMKVY (Pradhan Mantri Kaushal Vikas Yojana) and other government schemes are proposed to be leveraged to provide skill-based certifications that can be trusted and acknowledged in the ecosystem. It will also help the skilled cadre to access better livelihood opportunities in the future.
- **Develop and use Practice-based knowledge and content:** The scheme will make the program content which are atomic[4], learner-centric and digital, available in local languages in a way that they can be understood and consumed easily. The knowledge and content will also be open-source, made accessible and easily discoverable to the ecosystem.

5
Leverage Digital and IEC approach as an enabler for the program and the community

The scheme envisages leveraging digital tools and IEC (Information and Education Communication) activities to enable capability building.

Activities under Atal Jal Scheme:

- Real-time, trusted and verifiable data will be generated during the capacity building efforts that will aid scheme-tracking, as well as leave it behind as digital infrastructure for the stakeholders. It will also enable more informed and timely decisions by the SPMU/ DPMU. The insights generated from the data will also act as a guide for the DIPs.
- Atal Jal will use digital systems that reduce the effort and expertise required to collect and curate data.

  Atal Jal will create/use existing data standards that will enable other programs and systems to leverage and consume the data generated by the scheme.
- While training the water cadre in villages is important to create water security plans, it is also crucial to raise the awareness of the community members using mobilisation programs and other IEC activities. Without participation of all water users, it is not possible to manage demand or implement WSPs successfully. The scheme will look to develop visual training material in state-specific languages for the ease of understanding among community members. The content should give due importance to gender equity and environmental sustainability.

Support provided to the SPMU

NPMU, Atal Bhujal Yojana, and SPMUs in the participating states are partners, collectively working towards the success of the scheme. NPMU will create structures and artefacts to support SPMU in their capability building initiatives. This document and the consultations with the states are in line with the philosophy of partnership.

To support the states in assessment of their training needs and preparation of curriculum and content for their use, NPMU has defined a unified functional grid (please see Annexure 2 for QR code to view or click here to view). Functional Grid approach helps to identify the stakeholders in Atal Jal, their roles and the knowledge, skill, and tasks stakeholders have to acquire/perform to fulfil their role and then to identify the content required to build capacities of each of those stakeholders. Each state in the program can adopt the functional grid and contextualise it based on their requirements to finalise their respective capacity building needs and training calendars.

NPMU will also work towards creating sample content for various activities of the scheme. These atomic pieces of content will help the states in kick-starting their respective programs. The states are encouraged to use this approach to commission creation of the content pieces in local languages for their state specific needs, as per the functional grid.

NPMU also proposes to constitute a capacity building resource group to create and guide the overall capability building strategy at the national level. The experts and expertise of this group at NPMU level will be made available to the SPMU teams as well. The SPMUs can further enter into partnerships with appropriate resource organisations to seek their expertise and offer it to other actors that are expected to play a role in the scheme. These could include, but are not limited to, the state training institutes, NGOs and/or CBOs.

While this is just a start, NPMU will be open to support the states, based on the emerging needs. NPMU also recommends regular cross-learning interactions between the states so that best practices can be shared for the benefit of the scheme and there is an opportunity to understand challenges faced by one another. Such interactions could act as platforms to disseminate success stories emerging from the ground and achievements of states, part of Atal Jal.

[4] Click here for a sample content piece or refer to Annexure 2

05

Benefits to Stakeholders

The capacity building principles and approach are expected to benefit all the stakeholders in the scheme.

Picture: India Waterportal

Citizens

- Understanding of the science of groundwater in a demystified way.
- Participation in developing the WSP's and being able to make decisions based on the science and understanding of the data.
- Increased water security in the villages. Access to data and information about the current state of water quantity and quality in their village/GP , within the norms of data privacy and consent.

Gram Panchayat/ Local institutions/CRPs

- Have robust water security plans specific to the hydrogeological settings that are developed with understanding of science and inputs from the experts.
- Access to data that allows them to annually revisit and plan their cropping pattern and water use.
- Access to experts to help them resolve issues related to groundwater.
- Availability of expertise within the community as skilled cadre for sustainable water security.
- Livelihood opportunities for the skilled cadre
  Access to best practices from other panchayats.

Block/ District level institutions

- Ability to support the GP's and help them resolve issues at the GP level.
- Understand water security situations in their block/ district.
- Access to information that helps prioritise deployment of scarce resources.
- Visibility to drive better convergence across initiatives.

States

- Program support and tools to strengthen local institutional participation in groundwater management.
- A pool of trained experts who can help scale the work across the state.
- Ability to track, monitor, guide, and support the states and GPs with real time data on capacity building.
- Precision development capabilities to compress response times, and improve the way scarce resources are deployed to manage and support remote and underserved populations.

Country

- Robust infrastructure combined with ground level capabilities to enable sustained efforts at scale.
- A pool of experts who will be able to sustain the program learnings in multiple geographies even after the Scheme lifecycle.
- Infrastructure and ability to smoothly roll out schemes in the future by leveraging assets created during implementation of Atal Bhujal Yojana.

06

Financing Capacity Building Activities

Atal Bhujal Yojana recognizes the importance of the building capacities of stakeholders at various levels to foster participatory groundwater management for sustainable water security.

Atal Jal has provided an outlay of ₹1,400 Crore under the component of Institutional Strengthening and Capacity Building.

Expenditure under this component shall broadly include:

- Expenditure on procurement of equipment, engagement of experts, training and capability building to enhance institutional capacity for effective groundwater management at all levels;
- Cost of preparing Water Security Plans (WSPs), including engagement of District Implementation Partners (DIPs) viz. community-based organizations (CBOs)/non-governmental organizations/etc.; and
- Costs of Monitoring & Evaluation (M&E), independent verification, audit fees, Program management etc.

To ensure the institutions at the village level are strengthened and appropriate capacities are built within the villages the capacity building plan of the states may consider including financing the following when preparing their Project Implementation Plans and Annual Action Plans:

- Community owned Water Security Plan is the key to the success of the scheme. Prior experiences show that a minimum of 15-20 interactions are required to create a community owned WSP. The scheme should budget for these interactions during the creation of WSP and regular interactions during its implementation over the period of 5 years.
- The states would develop small, stakeholder-centric digital content for IEC and capacity building. These training materials would vary depending on factors including the administrative level (state, district, block, GP), type of stakeholder (community, CRP, VWSC, GP,, DPMU, SPMU etc), language, geology, and cultural aspects of the state. The states can leverage the functional grid to identify the content to be created by the Scheme and finance it appropriately.
- Water Security Plans must include the principles of hydrogeology and must be done 'first time right'[5] as any gap in the WSP will lead to suboptimal outcomes. The state's plan must include a process to ensure that appropriate capacities are built and financed appropriately.
- The success of the scheme will depend on the community leaders and community resource persons (Bhujal Jaankaars, Jaldoots, Jalsurakshaks etc) to collect groundwater level data, rainfall, and water quality in their GPs; help in creating the Water Budgets and Water Security Plans and update them on a regular basis. The CRPs need to be incentivized to perform

[5] The Scheme actors are able to create correct WSPs in format provided the Scheme and complete it as much as possible in the first iteration itself.

Picture: India Waterportal

these activities and should be held accountable for these activities. If the CRPs are not already a part of the water institutions and are resourced by the existing state budgets, the programs need to be financed for these activities.

- States may want to leverage the expertise on participatory groundwater management available in the ecosystem to support development of capacity building plans, creating the curriculum, training of trainers etc. The states may want to leverage this expertise in their capacity building initiatives and create a capacity building resource group along the lines of NPMU. In case the states need this support, they are requested to finance the same.
- To leverage digital technologies to enable scale, the states may need to procure appropriate software for their needs. This could include digital conferencing software, software to manage and distribute content to the various stakeholders. States may appropriately allocate budget for the same in their plans.

07

Implementing the Capacity Building Plan

The table below provides a framework to operationalise the capacity building strategy discussed in previous chapters. The second column ("Activities") in Table 2 below provides a list of activities that States can use for creating implementation plans for capacity building after contextualizing it. Table 2 also maps the activities to immediate outputs (column three "Outputs") that can be used as milestones in the operating plan. Column four ("Results") ties back the activities and outputs to program results as listed in the program guidelines and the "Outcomes" column highlights possible achievements even after the programme period.

Table 2: Implementation plan for States to roll-out capacity building

Resources	Activities	Outputs	Results	Outcomes
People	1. Recruit/ onboard/ orient functionaries for SPMU 2. Identify and align with experts, specialists, training agencies to support SPMU 3. Constitute DPMUs and block teams 4. Finalize DIPs for each block 5. Identify community resource persons (Bhujal Jankaars)	1. SPMU oriented on PGWM and scale design approach 2. Resource groups, master trainers trained 3. DIPs trained and engaged with CRPs	1. Groundwater data collected and made visible to the Scheme and communities 2. Water Security Plans prepared	Groundwater data and PGWM principles are practiced by communities even after the Scheme timeframe leading to sustained groundwater management
Content	1. Contextualize Functional Grid 2. Map existing content and customize as per content guidelines 3. Prepare and share crisp, practice videos in local languages for DIP & CRPs	1. Content consumed during and after training 2. Review of content views, downloads available	1. Scheme actors, including CRPs, share content beyond the program	The Scheme leaves behind training content in the ecosystem and democratizes access to open learning resources
Training	1. Use Functional Grid to assess training needs of all actors 2. Prepare training calendar 3. Assign master trainers to topics and sessions	1. Training completed and all participants have access to content	1. Demand based virtual interactions scheduled weekly between trainers and participants	Participants demand to learn more and training calendar updated to reflect the demand generated
Function	1. Prepare and share templates required for activities identified in Functional Grid (e.g. WSP template)	1. Weekly peer-to-peer and expert interactions lead to timely completion of plans	1. Review and vetting of plans prepared by communities through experts	Query resolution leads to closing of DLIs on time and visibility to the challenges on ground
Groups	1. Constitute/ strengthen village level groups (WMC/ VWSC) 2. Ensure women representation	1. Regular meetings are held at GPs 2. DIPs enable them to prepare water security plans	1. Gram Sabha pass WSPs after discussion 2. Fund leverage and source of convergence identified in GPs	Demand management and supply augmentation works taken up in villages with plan for sustainability
Coverage	Cover all villages selected and complete sensitization	First set of activities completed after signing off by communities	Sustained progress as per plan	Sustained groundwater management beyond the Scheme

		Activities	Outputs	Results	Outcomes
Enabling Environment	Tools	Make all functional tools available and train participants on their usage	Participants get attested for training attended and are able to use tools in the field	SPMU is able to monitor and verify progress of capacity building and make informed decisions using real-time data	Access to data is democratized and decision making becomes streamlined
	Structured Mentoring	Setup necessary infrastructure, identify trainers and create calendar for weekly virtual interactions	Increasingly more participation ensured from villages in virtual interactions, especially from women	Experts are able to reach more trainees in less time and resources, and peer learning is enabled	Increased comfort with virtual tools transforms capacity building and interaction mechanisms
Structure		Identify capability building resource group at State level and align on aspirations for the Scheme	Best practices from states are shared with each other and into national policies; Scheme Guidelines constantly revised incorporating best practices for scale	Policies and structural implementations done for groundwater management at scale in the country	States adopt Atal Bhujal Yojana beyond identified blocks and aim for saturation

Annexure 1

FAQ about key elements of Atal Jal

1. How to achieve water security?

Improved water security is achieved through a process of developing and understanding the local aquifers, which builds the local understanding and knowledge base on groundwater resources. This is followed by improving supply side interventions through appropriate measures for water conservation and managed aquifer recharge . Demand management is achieved through interventions aimed at improving efficiency of water use through various measures including use of micro-irrigation techniques, crop diversification, provision of dedicated electricity feeders for agricultural use etc.

Steps involved in operationalization of Water Security Plans:

- Determination of water consumption patterns, water availability and water demand through data collection and preparation of water budgets.
- Identification of measures to augment the ground water availability and to reduce its demand for various uses followed by preparation of GP level Water Security Plans to be financed through convergence of ongoing schemes.
- Constitution of water user groups, and creating agreed protocols for protecting the recharge areas and for safeguarding the water sources, limiting the water use, changing the cropping pattern, regular monitoring of water level and water quality, etc.

2. How can the approach and strategies of PGWM be integrated with Atal Jal?

- By Knowledge and skill building through training and handholding stakeholders working at various levels, especially at the PRI level: Foundation training, thematic training (on specific topics), training relevant to a specific geography or situation needs to be covered;
- By demystification of the science of groundwater to the communities using IEC tools and other media.
- By improving the interface with the communities through strategic communication;
- Coordination, convergence and project management can support communities for modification, customisation, and updation of Water Security Plans to ensure that they remain as effective as possible. Demand side interventions have to be strategically used as levers toward convergence on the supply side.
- By informing policy with success from ground as a part of the project management function of DIPs and departmental functionaries in the Scheme .
- By regular monitoring of activities at the community level preferably through a mobilebased application.

3. What kind of capacity building is useful in a Scheme involving scientific planning such as Atal Jal?

- Developing the pedagogy of training and capacity building including the curriculum for customized needs and contexts is critical for effective capacity building. Each training has to be approached through a set of learning objectives where each session addresses questions like target participants, content, delivery and impact apart from the larger pedagogical considerations around the training itself.
- Capacity building should be viewed both as a means of communication and a mechanism of connecting to stakeholders for further actions i.e. creating more interactions.
- Training on the concept of PGWM but with context and hydrogeologic typologies through frequent interaction for stakeholders who are closely involved in the Scheme such as the DIPs and frontline workers.
- Orientation programs on PGWM are recommended for government officials, program coordinators etc. depending upon the requirement, without going into in-depth technicalities of concepts.
- Special training on topics such as water quality, formation of village level institutions, treatment measures, nursery raising, SRI techniques etc. must be provided based on demand or as needed to implement water security plans.
- Field facilitation or hand-holding support must be provided, either physically or virtually, the idea being that trainees get multiple opportunities to interact with trainers and experts to resolve their field issues and keep making progress on the ground.
- Training material designed in formats that are conducive to easy consumption, such as videos for explaining specific tasks, presentations with voice-over for concepts, etc.

4. In which phases of the Scheme, is handholding support required at different levels, especially to the community?

- Formation and functioning of village-level institutions O & M of the sources and recharge areas
- Financial, material and labour contribution for O&M
- Collective decisions to be taken in the Gram Sabhas
- Approaching the concerned local government departments for support
- Collection of data for action research, monitoring, updating MIS, and converting analytics to decision-support through communication tools

5. What are the specifics of demand management?

- Normative aspects dealing with drinking water protection is key to sustaining demand management – especially around de-risking sources through the protocol of protection zones (lateral/distance and vertical/depth), efficient use of sources, groundwater quality improvement etc.
- Those aspects dealing with irrigation and irrigation wells with norms around collectivization, sharing of sources, pumping limits, depth of wells (including regulating bore holes) and crop water budgeting are also important. Several tools have been developed, but the most important one is deriving a groundwater balance leading to a crop water budget that is discussed, piloted and democratically adopted. One can also make an attempt to intervene on the market side by pushing for assured procurement and price through policy outreach.
- Prioritizing water usage – setting drinking water availability as the priority
- Crop water budgeting – particularly suggesting changes in cropping pattern or less water intensive crops.

- The above are carried out through discussions, baseline studies, PRA and protocols developed by the village level institutions engaging the villagers.

6. Can you create Water Security Plans in the Scheme? How do you manage to involve people and get them committed to implementing the plans, particularly around drinking and domestic water security?

- Yes. Water security plans are to be developed with the help of Gram panchayat, VWSC or WMC. The Gram panchayat's role is crucial in the implementation of WSPs. The funds and the decision making power lies with the GP and hence, their conviction and involvement in the Scheme is very important. A good capacity building plan which creates regular interactions of experts and government functionaries with frontline workers, easy-to-share digital content, relevant IEC, and support of DIPs to create long-term behaviour change can help get people more committed to see the implementation of WSPs created by them.

7. What are some key challenges in implementing the plans?

- Participation of the entire community due to social and other factors
- Consistency in data collection
- Timely funding for implementation of WSPs through covergence
- Support from village level institutions and the involvement of local CBOs
- Involvement of the concerned local govt departments
- Resolution of common/private/forest land coming under recharge area Sustaining O&M

8. How can IEC be made effective to achieve targeted sustainable outcomes?

- Innovation is necessary to develop effective IEC materials. Games, live demonstrations, interactive workshops, and exposure visits are necessary. Infographics, wall paintings, booklets, brochures, reports and street plays are also helpful. Besides classroom sessions and field interaction, information can be shared using virtual platforms like Whatsapp, Google drive, etc. For education purposes, a couple of online training sessions can help along with experience sharing workshops. Films/ short videos play a critical role in educating people using digital means.

9. How do you sustain the process, decisions and actions? What is the data-set that can be used to enable continued measurement of impacts? Can one provide key indicators of impact? Please list out these.

- The main driving force for sustenance is the active involvement of village level institutions like Gram Panchayat/ Water User Groups etc. Continuous data collection helps in decision support at the village level. Consistent fund flow in the village aid in sustenance of local decisions and actions. The impacts can be measured using water level data, water quality indicators, cropping data, an increase in the number of groundwater sources, period of water scarcity, income from agriculture and non-agricultural activities etc.. All these can be used as key indicators of impact.

Annexure 2

Resources and material for reference

Understanding program guidelines of Atal Bhujal Yojana	https://rebrand.ly/simplifiedguidelines	
Unified functional grid for participatory groundwater management by DLIs	https://rebrand.ly/functionalgrid	
List of NGOs with PGWM expertise in different States	https://rebrand.ly/PGWM-Experts	
Atomic Content Example	https://rebrand.ly/sample-content	
Example of virtual interaction with first mile worker to solve problems faced in the field	https://rebrand.ly/virtual-interaction	

To scan the QR code, please download any QR code scanner from the Google Play Store on your Android device (link) or App Store on a device running on iOS.

Annexure 3

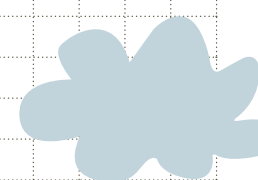
About ForWater Consortium

ForWater is a platform that aims to bring together people, ideas and actions to amplify the ability of the sector to achieve sustainable water security at scale. It also represents the collaboration of organizations belonging to "Samaaj, Sarkaar, and Bazaar" with a shared vision to support development that is both "participatory" and "drives scale" by building agency at local level, and entrusting the ability to manage water to communities.

The Participatory Ground Water Management (PGWM) Consortium, as a part of the ForWater collective, joined hands with the NPMU of Atal Jal and SPMUs of all participating States to draft this Capacity Building Framework Document which reflects the aspirations of the Scheme and a few tried and tested approaches that can ensure successful capacity building in the Scheme. The Consortium includes Arghyam, Arid Communications & Technologies (ACT), Advanced Center for Water Resources Development and Management (ACWADAM), Peoples' Science Institute (PSI), and Watershed Support Services and Activities Network (WASSAN). The Consortium has also consulted with Central Ground Water Board (CGWB), Rajiv Gandhi National Ground Water Training and Research Institute (RGNGWTRI) and Managing Aquifer Recharge and Sustaining Groundwater Use through Village-level Intervention (MARVI) partners for their expertise.

Apart from core technical expertise PGWM to facilitate demand management, these organizations also have expertise in delivering capacity building including conceptualization, development and delivery of capacity building inputs on a large scale. So far, the Consortium has worked on developing various capacity building assets for the Atal Jal Scheme, which have been referenced in this document.

notes



Design: Salil Divakar Sakhalkar & Snehal Balapure
Sixth Sense Corporate Communications

MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
GOVERNMENT OF INDIA

forwater

Prepared by the ForWater consortium in consultation with the National Programme Management Unit of the Atal Bhujal Yojana