सत्यमेव जयते

सातवीं लघु सिंचाई गणना और दूसरी जल निकायों की गणना के लिए अनुदेश पुस्तिका

MANUAL FOR 7TH MINOR IRRIGATION CENSUS & 2ND CENSUS OF WATER BODIES

संदर्भ वर्ष: 2023-24

(जुलाई 2023-जून 2024)

Reference Year: 2023-24
(July 2023-June 2024)

भारत सरकार

Government of India

जल शक्ति मंत्रालय

Ministry of Jal Shakti

जल संसाधन, नदी विकास एवं गंगा संरक्षण विभाग

Department of Water Resources, River Development and Ganga Rejuvenation

MANUAL
FOR
7th MINOR IRRIGATION CENSUS
&
2nd CENSUS OF WATER BODIES

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(July 2023- June 2024)

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
MINOR IRRIGATION (STATISTICS) WING

सी आर पाटील
C R Paatil

सत्यमेव जयते

जल शक्ति मंत्री
भारत सरकार
Minister of Jal Shakti
Government of India

Message

Water plays a crucial role in agricultural production and food security, especially in arid and semi-arid regions where irrigation is essential. Minor irrigation schemes are particularly beneficial due to their short gestation period, lower investment requirements, and immediate benefits to farmers. However, technological advancements, rainfall variations, groundwater levels, river flow patterns, and growing water demand highlight the need for regular reviews of Minor Irrigation schemes to ensure effective planning and decision-making.

India is home to a diverse array of natural and man-made water bodies, which are vital for maintaining water balance, preventing floods, supporting biodiversity, and ensuring food security and livelihoods. These water bodies have long served as a key source for Minor Irrigation. Unfortunately, rapid urbanization and excessive water extraction have negatively impacted their health. As such, the enumeration, preservation, conservation, and renovation of these water bodies are critical for long-term economic, social, and environmental sustainability.

To address these challenges, the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, is conducting the 7th Minor Irrigation (MI) Census, the 2nd Census of Water Bodies, the 1st Census of Major & Medium Irrigation (MMI) Projects, and the 1st Census of Springs across 35 States and Union Territories.

Consolidated manual has been developed to assist field-level personnel in data collection and validation. I hope the detailed methodology, concepts, FAQs etc provided in the manual shall ensure the collection of reliable data from field.

C R Paatil

जल शक्ति अभियान
संचय जल, बेहतर कल

Office : 210, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001
Tel: No. (011) 23711780, 23714663, 23714200, Fax : (011) 23710804
E-mail : minister-jalshakti@gov.in

डॉ. राज भूषण चौधरी
Dr. Raj Bhushan Choudhary

सत्यमेव जयते

जल शक्ति राज्य मंत्री
भारत सरकार
नई दिल्ली-110001
MINISTER OF STATE FOR JAL SHAKTI
GOVERNMENT OF INDIA
NEW DELHI - 110001

MESSAGE

Minor irrigation schemes play a crucial role in boosting agricultural productivity, enabling crop diversification, and supporting livelihoods, while addressing the challenges of unpredictable monsoon rainfall. A reliable database on minor irrigation schemes in the country is important for effective planning, policy making and sustainable water resource management.

Water is essential for all life on Earth, influencing every aspect of existence. By gathering comprehensive information about water bodies such as size, condition, status of encroachments, use, storage capacity etc. will help in creating a robust database of water bodies across the country. This database will serve as a vital tool for formulating strategies and policies for water resource assessment, monitoring and planning.

Given the importance of minor irrigation schemes and waterbodies, Ministry of Jal Shakti, Department of Water Resources, River development and Ganga Rejuvenation is undertaking the 7th Minor Irrigation Census and 2nd Census of Water Bodies along with 1st Census of Springs and 1stCensus of Major and Medium Irrigation Projects. The census shall be undertaken paperless, entirely in digital mode to ensure accuracy and efficiency.

I hope the Manual on 7th Minor Irrigation Census and 2nd Census of Water Bodies will serve as a valuable handbook for all stakeholders involved in the census process.

(Dr. Raj Bhushan Choudhary)

215, श्रम शक्ति भवन, रफी मार्ग, नई दिल्ली -110 001, 215, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001
दूरभाष : (011) 23708419, 23718759, फैक्स : 011-23354496, Tel. : (011) 23708419, 23718759, Fax : 011-23354496
ई-मेल/E-mail : mos-mowr@nic.in

देवश्री मुखर्जी
Debashree Mukherjee
सचिव
SECRETARY

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION

FOREWORD

The Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti has been conducting census of Minor Irrigation structures quinquienally since 1986-87 on the recommendation of the then Planning Commission under the Centrally Sponsored Scheme 'Irrigation Census'.

The Minor Irrigation Census is conducted in rural areas of all States/UTs and covers all ground water and surface water structures having Culturable Command Area (CCA) upto 2000 hectares. So far, six censuses have been conducted with reference years 1986-87, 1993-94, 2000-01, 2006-07, 2013-14 and 2017-18 respectively.

The Water Body Census is also conducted in all States/UTs and collect information on all important aspects of the subject including their condition, status of encroachments, use, storage capacity, status of filling up of storage etc.

I am happy to inform that Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD & GR) is also undertaking the 1st Census of Major and Medium Irrigation (MMI) projects and 1st Census of Springs along with 7th MI and 2nd Census of water bodies. The census shall be undertaken paperless, entirely in digital mode through a mobile application which will result in considerable savings in resources like time, cost etc.

This document will help the field level functionaries/primary workers in efficiently collecting the data on ground. This will serve as a guide on the concepts, definitions and procedure to be uniformly followed by all States/UTs during the field work.

I hope that the concerned officials involved in the conduct of census will make full use of this document for collection of data of these censuses.

(DEBASHREE MUKHERJEE)

श्रम शक्ति भवन,रफी मार्ग, नई दिल्ली-110 001 / Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001
Tel. : 011-23710305, 23715919, Fax : 011-23731553, E-mail : secy-mowr@nic.in, Website : http://www.mowr.gov.in

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ABBREVIATIONS:

BLO	Block Level Officer
CCA	Culturable Command Area
CGWB	Central Ground Water Board
CWC	Central Water Commission
DES	Directorate of Economics and Statistics
DIP	District Irrigation Plan
DLO	District Level Officer
DPAP	Drought Prone Area Programme
DOWR, RD & GR	Department of Water Resources, River Development & Ganga Rejuvenation
FOD	Field Operations Division
GPS	Global Positioning System
IHR	Indian Himalayan Region
IPC	Irrigation Potential Created
IPU	Irrigation Potential Utilized
ISRO	Indian Space Research Organization
LGD	Local Government Directory
MI	Minor Irrigation
NITI	National Institution for Transforming India
NGO	Non-Governmental Organization
NIC	National Informatics Centre
NSSO	National Sample Survey Office
PMKSY	Pradhan Mantri Krishi Sinchai Yojana
R&D	Research and Development
SAC	Space Application Centre
SASA	State Agricultural Statistics Authority
SIP	State Irrigation Plan
SLO	State Level Officer
SWIC	State Water Informatics Centre
UAT	User Acceptance Test
UT	Union Territory
WUA	Water User Association

CHAPTER ONE:

INTRODUCTION

Chapter One

1.0 INTRODUCTION

1.1. India has been primarily an agricultural country since ages. Water management is a crucial factor for agricultural output and food security. Keeping in view the limited availability of water, the optimum utilization of available water resources becomes more important. Moreover, the distribution of monsoon across the country is also not uniform. Therefore, there is a strong need for irrigation. Minor irrigation projects have the advantage of short gestation period, require smaller investment and benefits reach the farmers immediately.

1.2. Minor irrigation sector in the Government of India is handled by Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD & GR), Agriculture & Farmer's Welfare, Rural Development and Ministry of Tribal Affairs. Similarly, at the State level, respective Ministries and departments of Water Resources, Agriculture and Rural Development deal with the sector. Several initiatives have been taken towards providing financial assistance to different States to construct minor irrigation schemes, either through Department of Irrigation/Minor Irrigation, Water Resources Development or under PWD/local bodies for development of MI works and for management of on-farm irrigation system and water distribution devices.

1.3. In the States, no single Government Department is involved in development of minor irrigation works and a large number of private works are being constructed over the years in the States with or without support from State Government. Therefore, co-ordination and monitoring of information about minor irrigation works becomes difficult at the State level. A detailed census of minor irrigation works was first recommended by Planning Commission in 1970. The National Commission on Agriculture examined in detail the status of minor irrigation in India and recommended that a census of irrigation sources be carried out once in five years.

1.4. Keeping this in view, a central scheme "Rationalization of Minor Irrigation Statistics (RMIS)" was launched in 1987-88 with 100% Central assistance to the States/UTs. During the XIth Five Year Plan, the RMIS scheme became part of the Central Sector

Plan scheme “Development of Water Resources Information System (DWRIS)”. In 2017-18, the scheme was renamed as Irrigation Census Scheme.

1.5. For the implementation of the scheme, each State/UT identifies a Nodal Department for collection, compilation and dissemination of information for the State. State Statistical Cells are generally created within the Nodal Department so identified by the State Government. These Cells assist the Head of the Nodal Department or Census Commissioner in the State in organizing, coordinating and supervising the Census as and when planned by the Ministry. States may also setup PMU within the sanctioned strength of Statistical cells for taking technical expertise in handling huge volume of digital data.

1.6. The main objectives of the Irrigation Census Scheme are:

1.6.1. To build up a comprehensive and reliable database in the irrigation sector for effective planning and policymaking including water use efficiency, water budgeting etc.

1.6.2. To provide a benchmark data up to the village level under Minor Irrigation Census and up to village and ward level under Waterbody Census.

1.6.3. To provide statistical frame of irrigation schemes/waterbodies/spring for carrying out future surveys.

1.6.4. To build a national level database of Major and Medium Irrigation Projects since water resources projects are planned, formulated, implemented and maintained by the State Governments.

1.7. One of the major activities under the scheme is the conduct of Census of Minor Irrigation (MI) structures in the States/UTs covering all ground water and surface water schemes (which are mostly under private ownership up to 2000 ha.). In the MI Census, detailed information on various parameters like irrigation sources (dug well, shallow tube well, medium tube well, deep tube well, surface flow and surface lift schemes), irrigation potential created (IPC), irrigation potential utilized (IPU), ownership, holding size of land by owner, devices used for lifting water, sources of energy, energy conserving devices such as sprinkler and drip irrigation, use of non-conventional energy sources such as solar pumps, wind mills etc. is collected.

1.8. So far, six MI censuses have been conducted with reference years 1986-87, 1993-94, 2000-01, 2006-07, 2013-14 and 2017-18. In 2017-18, for the first time, the scope of the "Irrigation Census" scheme has been enlarged by the inclusion of Census of Water Bodies in convergence with Minor Irrigation Census with the objective of developing a national database for all water bodies. Now, the scope of the Irrigation Census scheme has further expanded by including Spring and Major and Medium Irrigation Projects to cover all irrigation schemes in the country.

1.9. The need for conducting a separate census of water bodies was pointed out by the Parliamentary Standing Committee on Water Resources on the subject "Repair, Renovation and Restoration of Water Bodies – Encroachment on water bodies and steps required to remove the encroachment and restore the water bodies". Department of Water Resources (DoWR), Ministry of Jal Shakti had maintained database of only those water bodies which were being provided Central assistance under the Scheme of Repair, Renovation and Restoration (RRR) of water bodies, thus confining its monitoring role to only such water bodies. The Committee recommended that in order to enable an objective assessment of water bodies and their condition, there should be separate census of water bodies and thereby creating a Central database on water bodies. As recommended by the Standing Committee, the first Census of Water bodies was launched by Department of Water Resources, River Development & Ganga Rejuvenation in convergence with the 6th Minor Irrigation census.

1.10. In the first Census of Water Bodies, information on all important aspects of the water body including their size, condition, status of encroachments, use, storage capacity, status of filling up of storage etc. is collected. The Census covered water bodies located in rural as well as urban areas and took into account all types of uses of Water Bodies like Irrigation, Industry, Pisciculture, Domestic/ Drinking, Recreation, Religious purpose, Ground Water Recharge and other purposes. Apart from the above parameters, ground truthing of water bodies in the Satellite Application Centre (SAC) database of ISRO has been incorporated in the 2nd Census of Water bodies.

1.11. Also, in both censuses, LGD coded villages/wards will be the primary unit of area of enumeration. In order to ensure accurate location particulars of MI schemes and Waterbodies, Reverse GIS technology will be enabled in the mobile application. The

previous census data will also be pre-populated in the mobile application for modifying existing schemes/water bodies or add new ones. Also, images of both MI Schemes and Waterbodies will be captured in the Census.

*****

CHAPTER TWO:

COVERAGE, CONCEPTS AND DEFINITIONS OF 7th MINOR IRRIGATION CENSUS

2.0 7th MINOR IRRIGATION CENSUS

General:

2.0.1 2nd Census of Waterbodies will be conducted in convergence with 7th Minor Irrigation Census using 2023-24 agricultural year as reference year. The census will be conducted fully in digital mode, data collection through mobile application and data validation and monitoring through web application. A dashboard showing the real time progress is also incorporated in the web application of the Census.

2.0.2 Minor Irrigation Census is the complete enumeration of all minor irrigation schemes located withing the geographical boundaries of the country. A scheme having Culturable Command Area up to 2,000 hectares individually is classified as minor irrigation scheme. It will also include the schemes meant only for recharge of ground water.

2.0.3 There are two types of minor irrigation schemes: groundwater schemes and surface water schemes. Groundwater schemes include dug wells and tube wells/bore wells. Surface water schemes consist of surface flow schemes and surface lift schemes. Schemes which are `permanently not in use' for irrigation purposes in 2017-18 or before will not be covered in this Census.

2.0.4 The reference year for 7th Minor Irrigation Census is 2023-24 agricultural year. The field work will be conducted within 6 months from the date commencement of the Census. The information during the Census would be collected through three schedules namely (i) Surface Water Schemes, (ii) Ground Water Schemes and (iii) Village Schedule. The third schedule, namely the Village Schedule: the summary of MI schemes will be prepared from the entries made in the Ground Water and Surface Water schedules.

2.0.5 The 7th MI Census will be conducted only in rural areas and village will be the primary area unit of enumeration. The Census will be using Local Government Directory (LGD) codes to list all villages in the country.

Scope & Coverage

2.0.6 The 7th MI Census will be conducted in rural areas of the whole of Indian Union except Lakshadweep and some areas that may remain inaccessible throughout the year and/or where State/UT Government find it impossible to collect the information.

Frame of the Census

2.0.7 The censuses shall use Local Government Directory (LGD) codes which have been developed by Ministry of Panchayati Raj as part of Panchayat Enterprise Suite (PES) under e-Panchayat Mission Mode project (MMP). The primary objective of the Local Government Directory (LGD) is to build a Standard location directory by providing an online platform to the States/UTs to maintain the up-to-date list of respective administrative units (Districts, Sub-Districts, Villages, Blocks, Local Governance bodies along with their corresponding Rural/ Urban wards) in collaboration with Office of the Registrar General of India (ORGI), Ministry of Home Affairs (MHA).

2.0.8 The adoption of LGD codes as the Standard location code in the e-Governance applications of Ministries/Departments/States/UTs was mandated by Cabinet Secretariat vide letter dated 04th November 2016. The agenda behind this directive from Cabinet Secretariat was to establish seamless exchange of data across all e-Governance applications and thus ensure transparency in the system.

2.0.9 Till previous round of censuses, the frame of census was taken from respective State/UTs, however, this time the censuses are done in complete digital way wherein the State/District/Sub-District (Development Block) / villages based LGD codes shall be automatically filled up in the mobile application by the enumerator. For this, the LGD codes as on 12.02.2025 are taken as the frame of censuses. The hierarchy used in LGD codes is State/ District/ Sub District (Development Block)/villages in rural area.

2.0.10 Master frame has been shared with all States/UTs for confirmation and left out villages/wards in LG Directory, if any, will be incorporated later in the frame. As per the master frame, there are 6,67,220 villages and 91,458 wards in the country. The list of duplicate villages/wards within a subdistrict (block)/town has also been provided to the State/UT for taking extra caution while assigning enumerators in those villages/wards. State/UT wise number of villages and wards are given in the Annexure I. Detailed guideline for updating master frame are given in Annexure II.

2.0.11 Keeping in view the convenience of enumerator for carrying out the field work of censuses at ground, it was decided to pre-populate some of key parameters of the previous round of censuses wherein the enumerator can either keep the same data which is pre-populated or the data can be modified. For this, the census code (used in previous census) of villages was mapped with the LGD code (which are being used in the ongoing census) of that village. This exercise was undertaken with the help of States/UTs. Due to various administrative challenges, such as the renaming, splitting or formation of new districts, blocks, or villages, achieving complete mapping has not

been possible. Therefore, the pre-populated data from the previous censuses shall be available only for the villages where mapping has been successfully completed.

Concepts and definitions

2.0.12 **Gross Command Area (GCA):** The GCA is the total area that can be economically irrigated from an irrigation scheme, while the unculturable area includes areas like habitats, roads, drainage, and other non-agricultural areas.

2.0.13 **Culturable Command Area (CCA):** The area which can be irrigated from a scheme and is fit for cultivation. The culturable command area (CCA) for a particular irrigation scheme is determined by subtracting the unculturable area from the gross command area (GCA).

Therefore, the formula to calculate CCA is: CCA = GCA - Unculturable area. For example, if a minor irrigation scheme has a gross command area (GCA) of 450 hectares, encompassing a habitat and road covering 160 hectares, then its culturable command area (CCA) will be: CCA = 450 hectares - 160 hectares = 290 hectares. The CCA is an important factor in determining the design discharge of the scheme, the intensity of irrigation, and the duty of the water at the head of the scheme.

2.0.14 **Cultivable area:** It consists of net area sown, current fallow, fallow lands, other than current fallow, culturable waste and land under miscellaneous tree crops.

2.0.15 **Gross Irrigated Area:** The area irrigated under various crops during a year, counting the area irrigated under more than one crop during the same year as many times as the number of crops grown and irrigated.

2.0.16 **Net Irrigated area:** Net irrigated area is the area cultivated and irrigated at least once in the reference year in any one season or for any one crop.

2.0.17 **Irrigation Potential Created (IPC):** The total gross area proposed to be irrigated under different crops during a year by a scheme. The area proposed to be irrigated under more than one crop during the same year is counted as many times as the number of crops grown and irrigated. If original Irrigation Potential of the scheme is not known, then the maximum area irrigated during the past five year or so may be taken as the IPC.

2.0.18 **Irrigation Potential Utilized (IPU):** The gross area actually irrigated during reference year out of the gross proposed area to be irrigated by the scheme during the year.

2.0.19 **Minor Irrigation (M.I.) Scheme:** A scheme having CCA up to 2,000 hectares individually is classified as minor irrigation scheme. It will also include the schemes meant only for recharge of ground water.

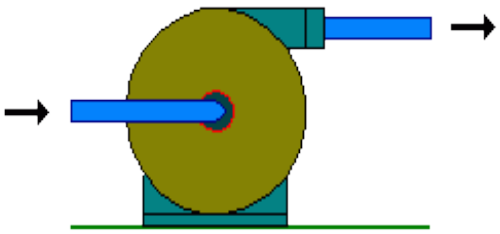
2.0.20 **Medium Irrigation Scheme:** A scheme having CCA more than 2,000 hectares and up to 10,000 hectares individually is a medium irrigation scheme.

2.0.21 **Major Irrigation Scheme:** A scheme having CCA more than 10,000 hectares is major irrigation scheme.

2.0.22 **Sprinkler Irrigation System:** Sprinkler Irrigation is a method of applying irrigation water which is similar to rainfall. Water is distributed through a system of pipes usually by pumping. It is then sprayed into the air of entire soil surface through spray heads so that it breaks up into small water drops which fall to the ground.

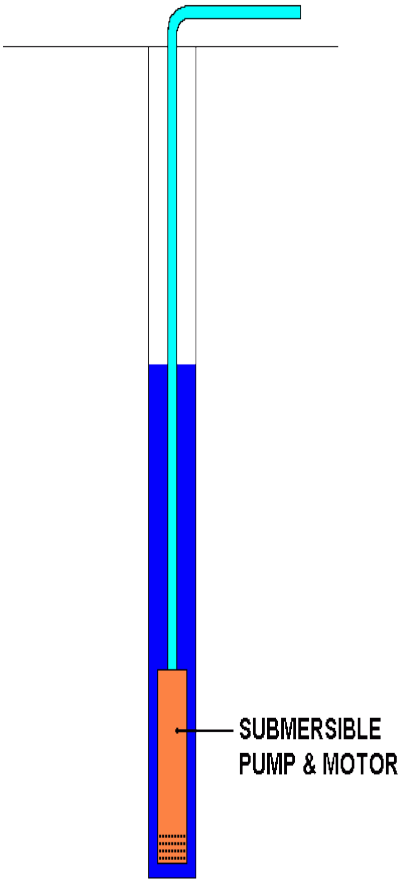
2.0.23 **Drip irrigation system:** Drip irrigation system delivers water to the crop using a network of mainlines, sub-mains and lateral lines with emission points spaced along their lengths. Each dripper/emitter, orifice supplies a measured, precisely controlled uniform application of water, nutrients, and other required growth substances directly into the root zone of the plant.

2.0.24 **Non- Submersible or Centrifugal Pump:** The most common type of pump. Typically, the pump is "close-coupled" to an electric motor, that is, the pump is mounted right on the end of the motor's drive shaft and the pump case is bolted straight into the motor so that it looks like a single unit. The water typically enters the pump through a "suction inlet" centered on one side of the pump, and exits at the top. Almost all portable pumps are end-suction centrifugal. If the pump isn't one of the next two types, then chances are it is an end-

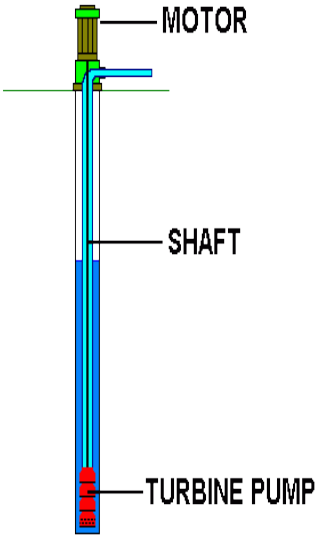


END-SUCTION CENTRIFUGAL PUMP

suction centrifugal. This type of pump needs to be installed on a pad above the high water level if pumping from a lake or river. Submersible Pump: Submersible pumps are installed completely underwater, including the motor. The pump consists of an electric motor and pump combined in a single unit. Typically, the pump will be shaped like a long cylinder so that it can fit down inside of a well casing. Although most submersibles are designed to be installed in a well, many can also be laid on their side on the bottom of a lake or stream. Another common installation method for lakes and rivers is to mount the submersible pump underwater to the side of a pier pile (post). Submersibles don't need to be primed since they are already under water. They also tend to be more efficient because they only push the water, they don't need to suck water into them. Most submersible pumps must be installed in a special sleeve if they are not installed in a well, and sometimes they need a sleeve even when installed in a well. The sleeve forces water coming into the pump to flow over the surface of the pump motor to keep the motor cool. Without the sleeve the pump will burn up. Because the power cord runs down to the pump through the water it is very important that it be protected from accidental damage.



2.0.25 **Turbines and Jet Pumps:** A turbine pump is basically a centrifugal pump mounted underwater and attached by a shaft to a motor mounted above the water. The shaft usually extends down the center of a large pipe. The water is pumped up this pipe and exits directly under the motor. Turbine pumps are very efficient and are used primarily for larger pump applications. They are typically the type of pumps used on municipal water system wells. When you see a huge motor mounted on its end over a well that is most likely a turbine pump. One uses turbine pumps for large parks and golf courses where we are pumping from lakes. The turbine pump is mounted in a large concrete vault with a pipe connecting it to the lake. The water flows



by gravity into the vault where it enters the pump. The pump motors are suspended over the vault on a frame. A jet pump is similar to a turbine pump but it works by redirecting water back down to the intake to help lift the water.

2.1 GROUND WATER SCHEMES

2.1.1 **Dug-well:** It covers ordinary open wells of varying dimension dug or sunk from the ground surface into water bearing stratum to extract water for irrigation purposes. These are broadly dug-cum-bore wells now-a-days or masonry wells/ kutcha wells water from which are lifted with the help of animals/ human. Most of such schemes are of private nature belonging to individual cultivator. The parameter of the well ranges between 2 to 6 meters and the depth between 8 and 15 meters. CCA of a well operated with the help of human/ animals generally varies from 1 to 2 hectares and in case of Dug-cum-Bore Well it may be as in case of a Tube Well of similar capacity and depth of bore.

2.1.2 **Bore Well:** It is a well drilled in Hard Rock Formation to tap the water bearing zone(aquifer). The overburden in such case is encased to eliminate the risk of caving in and the rest of the bore is normally left unsupported to allow the water to flow from crevices and fissures into the bore.

2.1.3 **Shallow tube-well:** It consists of a bore hole built into ground with the purpose of tapping ground water from porous zones. In sedimentary formations depth of a shallow tube well does not exceed 35 meters. These tube wells are either cavity tube-wells or strainer tube-wells. These are usually drilled by percussion method using hand boring sets and sometimes percussion rigs. Success and popularity of the scheme depends on how cheap they are. A coir structure formed by binding coir strings over an iron frame is being used as strainer. In shallow water table areas, bamboo frames are also used. Sometimes steel pipe casing is replaced by pipes constructed by rapping bituminized gunny bags over the bamboo frame. These are called bore wells, in which bore-hole is stable without a lining in the bottom portion and a tube is inserted only in the upper zone. The shallow tube wells are generally operated for 6 to 8 hours during irrigation season and give yield of 100-200 cubic meters per day, which is roughly 2 times that of a dug well. Their CCA may go up to 10 hectares.

2.1.4 **Medium Tube Well** It consists of a bore hole built into ground with the purpose of tapping ground water from porous zones. In sedimentary formations depth of a medium tube well will be in the range of 35-70 meters. The medium tube wells are generally operated for 8-10 hours during irrigation season and give yield of 200-300 cubic meters per day, which is roughly 3 times that of a dug well. Their CCA may go from 10-15 hectares.

2.1.5 **Deep tube wells:** It usually extends to the depth of 70 meter and more and is designed to give a discharge of 100 to 200 cubic meters per hour. The deep tube wells are drilled by rotary percussion or rotary cum percussion rigs. These tube wells operate round the clock during the irrigation season, depending upon the availability of power. Their annual output is roughly 15 times that of an average shallow tube well and are usually constructed as public scheme which are owned and operated by government departments or corporations. Their CCA may go up to 50 hectares.

2.1.6 **Artesian Well:** The term "artesian" comes from the region of Artois in France, where artesian wells were first drilled in 1126. A well is known as artesian well if the water level of the tapped confined aquifer rises above the top of the aquifer or even above the ground surface. A flowing artesian well is a specific type of artesian well where the natural pressure within the aquifer is so high that the water rises above the ground surface without the need of any pumping equipment.

The characteristics of an artesian well are

i. It extracts water from a confined aquifer.
ii. Water level of an artesian aquifer is above the aquifer.
iii. In case of flowing artesian well water flows automatically to the surface (reference figure below). In some artesian wells water may not overflow well-casing; however, the water level in the well casing is above the ground surface.

(a) (b)

Free flowing or auto flow well- constructed by CGWB at (a) Bhergaon, Udalguri District, Assam. (b) Charaimari, Baksa District, Assam

iv. To prevent loss of groundwater from flowing artesian well, height of the well casing pipes above the surface may be high (reference figure below).

Height of well head is kept high to prevent loss of groundwater at Tilpuri-1, Gadarpur Block, Udham Singh Nagar District, Uttarkhand

v. Incessant abstraction from flowing artesian wells can reduce pore pressures in the naturally 'over pressured' artesian aquifers so as to cause widespread land subsidence of considerable magnitude. This is noticed in Neyville, Tamil Nadu (reference figure below)

Land subsidence marked by height of top of well-casing grout above land surface, caused by underestimated rates of required pumping for mine dewatering (photos by J. Toth).

vi. Flowing artesian wells are most common at the base of slopes in hilly terrain, where high heads within the uplands can induce strong upward hydraulic gradients (reference figure below).

Flowing artesian well is used for irrigation in Khowai District, Tripura

2.2 SURFACE WATER SCHEMES

2.2.1 **Surface flow irrigation scheme:** These schemes use rainwater for irrigation purposes either by storing it or by diverting it from a stream, nalah or river. Sometimes, permanent diversions are constructed for utilising the flowing water of a stream or river.

Temporary diversions are also constructed in many areas which are usually washed away during the rainy season. The small storage tanks are called ponds or bundhis which are mostly community owned. The command areas of such schemes are 20 hectares or less. The large storage tanks whose command varies from 20 to 2000 hectares are generally constructed by government departments or local bodies. These are the biggest items of surface minor irrigation works.

2.2.1.1 **Storage schemes (Tanks and other storages):** Storage schemes include tanks and reservoirs which impound water of streams and rivers for irrigation purposes. After wells, tanks occupy a very important place under the minor irrigation programme. They provide nearly two-third of the total irrigation from minor sources in the states of Andhra Pradesh, Karnataka, Kerala, Maharashtra, Orissa and Tamil Nadu. Tracts with undulating topography and rocky sub-strata are eminently suitable for tank irrigation. Besides, there exists scope for further construction of tanks in many areas. A large number of existing tanks in southern States have gone into disuse due to long neglect of repairs. Renovation of these tanks so as to restore the lost irrigation potential is being accorded priority under the minor irrigation programme.

The essential features of these schemes are

a. a bund or a dam which is generally of earth, but is also sometimes partly or fully masonry,
b. anicut and feeder channels to divert water from adjoining catchments,
c. a waste weir to dispose of surplus flood water,
d. sluice or sluices to let out water for irrigation, and
e. conveyance and distribution system.

The size of the storage is determined by the run-off expected on the basis of dependable monsoon rainfall in the catchment and by the fact whether the rainfall and cropping pattern would permit more than one filling of the tank.

2.2.1.2 **Diversion schemes:** These schemes aim at providing gravity flow irrigation by mere diversion of stream water supply without creating any storage. As compared to storage schemes they are economical but their feasibility is dependent on the presence of flow in the stream at the time of actual irrigation requirements. Essentially such schemes

consist of

a. an obstruction (weir) or bund constructed across the stream for raising and diverting water; the weir being called anicut in the South, bandhara in Maharashtra and Gujarat, and Bandh in the Assam region, and
b. an artificial channel, known as kul in the hilly areas, pyne in Chhota Nagpur and Bihar and dong in the Assam region.

In case of small schemes which have prominent scope in the hilly tracts and foot hill plains, the water is usually diverted by constructing temporary bunds across the streams, made up of earth, stones or even bamboos. The discharge handled being of small order, the bund on the head of the channel is not provided with any gated structure for controlling and regulating the flow. Construction of work, is, therefore, simple and cheap and can be handled to a large extent by the people themselves. However, these constructions being temporary, require frequent renovation. The bunds are liable to be washed away by every major flood. The channels also get silted up and scoured frequently. It is essential that whenever such schemes aim at diverting higher discharges, say more than 5 to 10 cusecs, or tackle streams having high intensity of flood discharge, proper regulation structures equipped with suitable types of gates are provided. Weir has to be provided with scouring sluices in order to regulate the flow of silt in the off-taking channels. The construction of masonry weir is comparatively simpler and cheaper where rocky foundation is available beneath the streambed. The design of the weir on permeable and erodible foundation is more complicated and requires specialised engineering knowledge.

2.2.1.3 **Water conservation-cum-ground-water recharging Schemes:** Under this head are included schemes which serve primarily one or more of the following purposes:

a. submerging agricultural land during monsoon for sowing post-monsoon crops,
b. improving moisture regime of the adjoining fields downstream for raising of post-monsoon crops without irrigation and replenishing the ground water.

An additional advantage of these schemes is that they help to conserve the soil. When constructed in the head water region serving catchment area of tanks down below, they serve the important purpose of retarding the silting rate of these tanks.

The system of water conservation through field embankments is peculiar to central Indian tracts and is commonly in vogue in the northern Madhya Pradesh, Bundhelkhand region of Uttar Pradesh and eastern Rajasthan. In the Bundhelkhand region, these works are popularly known as 'bundhies', which consist of earthen embankments thrown across gently sloping ground. During the rainy season, water is stored upstream and the land gets submerged. If the land slope is gradual, often large areas get submerged even by low embankments. Ordinarily, no direct irrigation is carried out and benefit is mostly due to submergence. In nearly all these areas, the soil is generally black which is retentive of moisture. After remaining submerged under water during the rainy season, the soil retains sufficient moisture to grow good rabi crops. The remaining water is let out and the submerged land released for cultivation. The other advantage of submerging land in this manner is that the first flood brings a lot of silt which acts as rich manure. By preventing free flow of water across steep gradient, the soil of the land is also conserved.

Ahars in Bihar, which store water for irrigation of paddy fields, also function somewhat in a similar manner. Water is let out in October for irrigating the rice fields and the drained out fields in the bed of the ahars are cultivated with rabi crops. The head water tanks popularly in vogue in Orissa have a similar role to perform. These consist of bunds put up across slope at the head of gullies with the objective of impounding and diverting the cumulative run-off into the wider valley area downstream of the bunds by percolation, seepage and surface flow. Surface channels are provided in the flanks to carry floodwater received in excess of the storage capacity of the bunds during the monsoon season.

Percolation tanks primarily constructed for the purpose of recharging ground water are in vogue in Maharashtra, Tamil Nadu, Kerala and Rajasthan. Check-dams or rapats are in vogue in Rajasthan. They consist of bunds constructed across the streams for the purpose of retarding the surface flow and also the sub-surface flow to some extent by making the bed slope of the stream flattened. This results in increased percolation of water in the sub-soil with consequent increase of the ground water supply.

2.2.2 **Surface Lift Irrigation Scheme:** In regions where the topography does not permit direct flow irrigation from rivers and streams, water has to be lifted into the irrigation channels. These works are similar to diversion schemes, but in addition pumps are

installed and pump houses constructed. These schemes, being costly in operation, are feasible only in areas where

a. gravity flow irrigation is not possible
b. there is keen demand for irrigation and cultivators are enthusiastic,
c. water is available in the streams for at least about 200 days in a year, and
d. cheap electric power is available.

Installation of diesel operated pump sets for lifting water makes the operation and maintenance cost of these schemes exorbitantly high. However, for lifting small order of discharge by individual cultivators, portable diesel engine pump sets are feasible as they provide greater flexibility and mobility for installation at different points of the water source or sources. In some areas Solar Pumps are also used for lifting water. The CCA of such schemes may go up to 20 hectares.

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CHAPTER THREE:

COVERAGE, CONCEPTS AND DEFINITIONS OF 2nd CENSUS OF WATER BODIES

3.0 2nd CENSUS OF WATER BODIES

General

3.0.1 The reference year for 2nd Census of waterbodies is 2023-24 agricultural year. The field work will be conducted between April 2025 to September 2025. The information during the Census would be collected through Waterbody Schedule. The Village Schedule will contain the summary of waterbodies as per the entries contained in the Waterbody schedule.

3.0.2 The 2nd Census of waterbodies will be conducted both in rural areas and urban areas. Village and Ward will be the primary area unit of enumeration in rural areas and urban areas respectively. The Census will be using Local Government Directory (LGD) codes to list all administrative units across the country.

Scope & Coverage

3.0.3 The 2nd Census of Waterbodies will be conducted in whole of Indian Union except Lakshadweep and some areas that may remain inaccessible throughout the year and/or where State/UT Government find it impossible to collect the information.

Frame

3.0.4 The censuses shall use Local Government Directory (LGD) codes which have been developed by Ministry of Panchayati Raj as part of Panchayat Enterprise Suite (PES) under e-Panchayat Mission Mode project (MMP). The primary objective of the Local Government Directory (LGD) is to build a Standard location directory by providing an online platform to the States/UTs to maintain the up-to-date list of respective administrative units (Districts, Sub-Districts, Villages, Blocks, Local Governance bodies along with their corresponding Rural/ Urban wards) in collaboration with Office of the Registrar General of India (ORGI), Ministry of Home Affairs (MHA).

3.0.5 The adoption of LGD codes as the Standard location code in the e-Governance applications of Ministries/Departments/States/UTs will establish seamless exchange of data across all e-Governance applications and thus ensure transparency in the system.

3.0.6 Till previous round of censuses, the frame of census was taken from respective State/UTs, however, this time the censuses are done in complete digital way wherein the State/District/Sub-District (Development Block) / villages based LGD codes in rural and State/District/Town / Ward based LGD codes shall be automatically filled up

in the mobile application of the enumerator. For this, the LGD codes as on 12.02.2025 are taken as the frame of censuses. The hierarchy used in LGD codes is State/ District/ Sub District (Development Block)/villages in rural area and State/District/Town/ward in urban area.

3.0.7 Master frame has been shared with all States/UTs for confirmation and left out villages in LG Directory, if any, will be incorporated later in the frame. As per the master frame, there are 6,67,220 villages and 91,458 wards in the country. The list of duplicate villages/wards within a subdistrict (block)/town has also been provided to the State/UT for taking extra caution while assigning enumerators in those villages/wards.

3.0.8 Keeping in view the convenience of enumerator for carrying out the field work of censuses at ground, it was decided to pre-populate some of key parameters of the previous round of censuses wherein the enumerator can either keep the same data which is pre-populated or the data can be modified. For this, the census code (used in previous census) of villages was mapped with the LGD code (which are being used in the ongoing census) of that village. This exercise was undertaken with the help of States/UTs. Due to various administrative challenges, such as the renaming, splitting or formation of new districts, blocks, or villages, achieving complete mapping has not been possible. Therefore, the pre-populated data from the previous censuses shall be available only for the villages where mapping has been successfully completed.

Concepts and Definitions

3.0.9 **Waterbodies**: Waterbodies are areas of water, both salty and fresh, large and small, which are distinct from one another in various ways. The largest water bodies are oceans, while the smallest are brooks or ponds. Smaller accumulations of water, such as puddles or swimming pools are not usually referred to as water bodies in the geographical sense.

3.1 DEFINITION OF WATER BODY TO BE USED:

3.1.1 **Water body:** All natural or man-made units bounded on all sides with some or no masonry work used for storing water for irrigation or other purposes (e.g. industrial, pisciculture, domestic/drinking, recreation, religious, **ground** water recharge etc.) will be treated as water bodies in this Census. These are usually of various types known by

different names like tank, reservoirs, ponds and bundhies etc. A structure where water from ice-melt, streams, springs, rain or drainage of water from residential or other areas is accumulated or water is stored by diversion from a stream, nala or river will also be treated as water body.

3.1.2 **Following type of water bodies are excluded:**

i. Ocean, lagoons.
ii. River, Stream, spring, waterfalls, canals etc. which are free flowing without any bounded storage of water.
iii. Swimming Pool.
iv. Covered Water tank created for specific purpose by any individual family or household for their sole consumption.
v. Water tank constructed by any factory owner for consumption of water as raw material or consumable.
vi. Temporary water bodies created by digging for mining, brick kilns, and construction activities. These may get filled up during rainy season.
vii. Pucca open water tank created only for drinking for cattle.

3.2 Types of Water Bodies:

Following type of water bodies are included. (The list is indicative but not exhaustive).

3.2.1 **Ponds:** A small body of water usually earthen though masonry dykes are also included and shallow made through excavations which represent a restricted environment. Ponds usually describe small bodies of water generally no one would require a boat to cross.

3.2.2 **Lakes:** A lake is a large area filled with water that is surrounded by land. Lakes lie on land and are not part of the ocean and therefore are distinct from lagoons, and are also larger and deeper than ponds.

3.2.3 **Tanks:** A shallow water unit usually larger than a pond created by constructing earthen or masonry barricades which receives water either from tube wells or rains.

3.2.4 **Reservoirs:** A large man made impoundment of varying magnitude created by

erecting, bunds, dams, barrages or other hydraulic structures across streams or rivers serving one or more purposes such as irrigation, power generation, flood control or other water resource development projects.

3.2.5 **Water conservation Schemes:** Water conservation schemes are aimed at improving moisture regime of the adjoining fields downstream for raising of post monsoon crops without irrigation. This may include percolation tanks and check dams. Both result in increased percolation of water in the sub-soil with consequent increase of the ground water supply.

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CHAPTER FOUR:

METHODOLOGY
FOR CONDUCTING
7th MINOR IRRIGATION CENSUS
&
2nd CENSUS OF WATER BODIES

4.0 METHODOLOGY:

4.0.1 The 7th MI Census and the 2nd Census of Water Bodies will be conducted entirely digitally through a mobile application, eliminating the need for paper-based data collection. The ultimate unit of enumeration for both censuses is the village in rural areas and ward in urban areas. To ensure smooth execution, nodal departments in States/UTs must designate State Level Officers (SLOs), District Level Officers (DLOs), Block Level Officers (BLOs), and Enumerators. The SLO will be responsible for creating user accounts at the district level, which will cascade down to block-level officers, who will then assign villages to enumerators. Each village/ward will be assigned to a single enumerator, ensuring no duplication.

4.0.2 There will be a provision for creation of multiple user IDs for a Block. While creating the user ID of blocks by District Level Officer (DLO), an excel/pdf sheet will appear wherein the names of blocks along with number of villages in the blocks shall be visible to DLO. He may either create one user ID for a block or more than one user ID for the same block, as per the number of villages in the block. There will be only one user IDs for block up to 50 villages. Similarly, for 1-100 villages, DLO shall have an option to create two user IDs for the block. This way the creation of block level user ID shall be done on multiple of 50 villages.

4.0.3 The enumerator will begin by surveying all water bodies within the village, followed by canvassing the Surface Water schedule, Ground Water schedule, and finally, the Village schedule. The mobile application, functioning in both online and offline modes, will be used for data collection, requiring enumerators to capture latitude/longitude and images of each scheme. While data entry and scrutiny will be carried out digitally, validation will take place on an online portal developed by NIC. The data should be collected within 6 months by the respective States/UTs before undergoing further examination at the Central level.

4.0.4 While the field work is going on, supervision and checking is required to be done by following officers as per the norms prescribed.:

i. Block/Sub- district Level Officers
ii. District Level Officers
iii. State Level Officers

4.0.5 Central team along with the State Statistical Cell officials would also visit the State and

check the quality of field work.

4.1 Implementation Guidelines:

4.1.1 A Steering Committee is to be formed in each State with Secretary of the Nodal Department for conduct of MI and water body census as Chairman and members from the CWC, State Departments of Revenue, Irrigation, Water Resources, Panchayati Raj, State Planning, DES, Rural Development and State head of NSSO (FOD). A technical Sub Committee will be formed under the Chairmanship of Regional Chief Engineer of CWC in charge of the State to provide technical inputs and guide the State Nodal Statistical Cell during the Census operations. A representative from regional office of CGWB and State Water Informatics Centre (SWIC) wherever established will also be a member of this Committee. Considering the inclusion of Census of Springs, the Chairman of the committee may also co-opt representatives from other concerned State Departments like Ground Water Department, Geological Department, Soil & Water Conservation Department etc. Further, it may be ensured that representatives from Nodal Departments for census of Major and Medium Irrigation Projects and Census of Springs should be there in Steering Committee as well as in Technical Sub Committee.

4.1.2 State/UT may devise their own training modules and manuals in regional languages for imparting trainings.

4.1.3 Publicity campaign at State / district level shall be under taken. The campaign may be done through print and social media and the Census Commissioners of State/UT has to ensure timely execution of the same.

4.2 Process Flow

4.2.1 Flow of activities to be done at State, District, Block and Enumerator has been illustrated below for use of Web application and Mobile application.

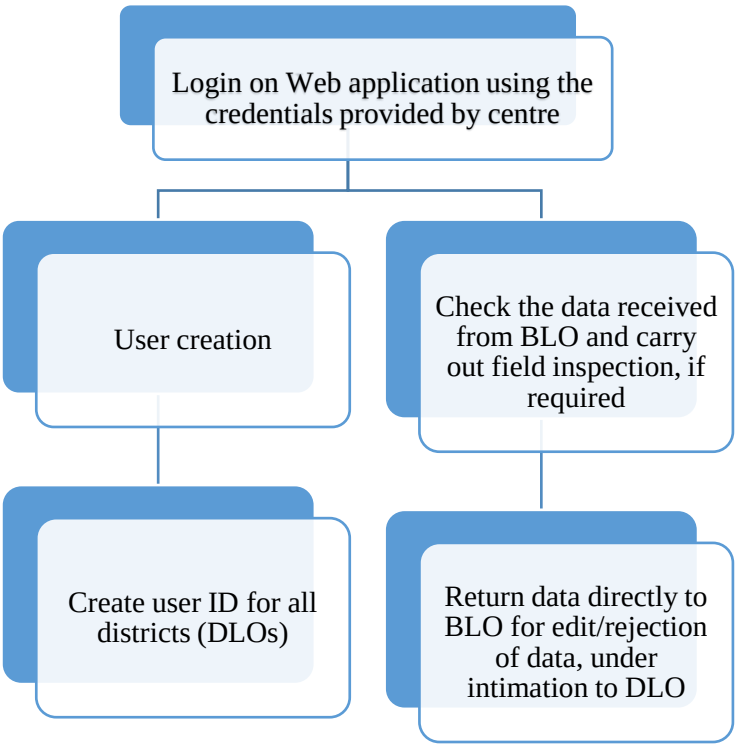
4.2.2 **State Level**: While login into the web application by State Level Officer, one time authentication has to be done with the help of OTP received on the email and mobile number.

4.2.2.1 State Level Officer has to assign officers for each district before district level user creation. While user creation on the web application, email and mobile number of the official for whom the District login ID is created has to be entered.

4.2.2.2 Schedules submitted by BLO to DLO will be available on SLO account also. Scrutiny may be undertaken on those schedules and it may be returned to DLO for modifications required, if any, at BLO level.

4.2.2.3 SLO may also undertake random field inspections to ensure the quality of data.

4.2.2.4 SLO Level Process Flow is given below:



4.2.3 **District level**: While login into the web application by District Level Officer with the help of user ID and password provided by State Level Officer, one time authentication has to be done with the help of OTP received on the email and mobile number (as entered by State level officer while creating the login)

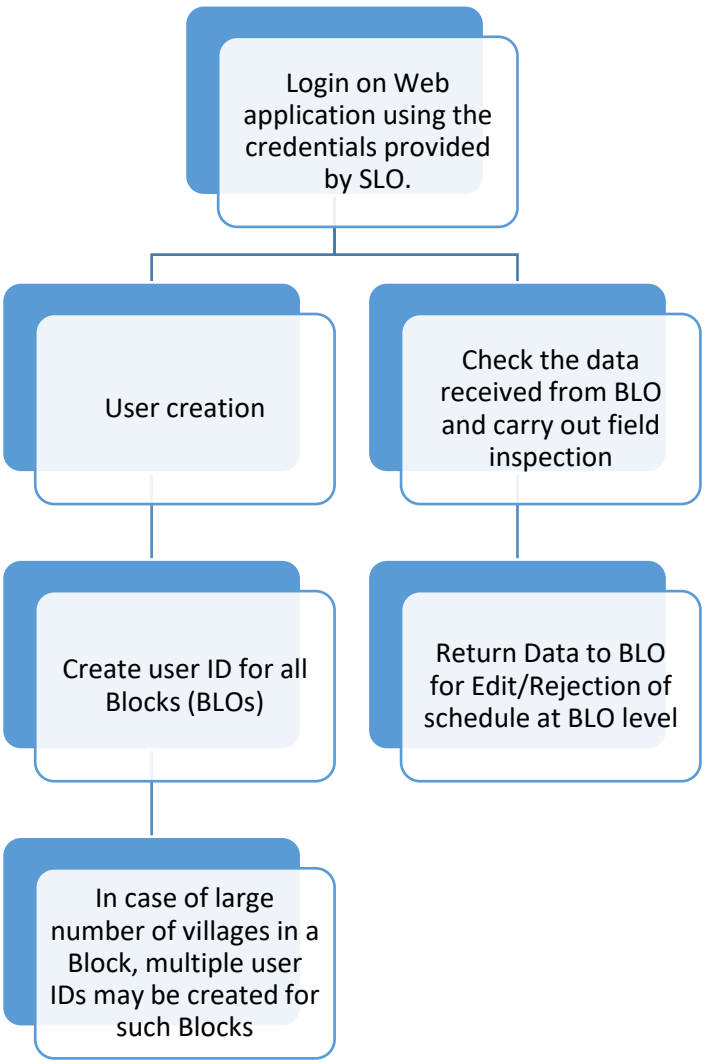
4.2.4 District Level Officer has to assign officers for each Block/Sub-District before user creation on web application of the Census. While user creation on the web application, email and mobile number of the official for whom the Block/Sub-District login ID is created has to be entered.

4.2.4.1 DLO may either create one user ID for a block or more than one user ID for the same block, as per the number of villages in the block. There will be only one user IDs for block up to 50 villages. Similarly, for 1-100 villages, DLO shall have an option to

create two user IDs for the block. This way the creation of block level user ID shall be done on multiple of 50 villages.

4.2.4.2 Scrutiny may be undertaken on schedules submitted by BLO and it may be returned to BLO for modifications required, if any, at BLO level. DLO may also undertake random field inspections to ensure the quality of data.

4.2.4.3 DLO Level Process Flow is given below:



4.2.5 **Block Level**: While login into the web application by Block Level Officer with the help of user ID and password provided by District Level Officer, one time authentication has to be done with the help of OTP received on the email and mobile number (as entered by District level officer while creating the login)

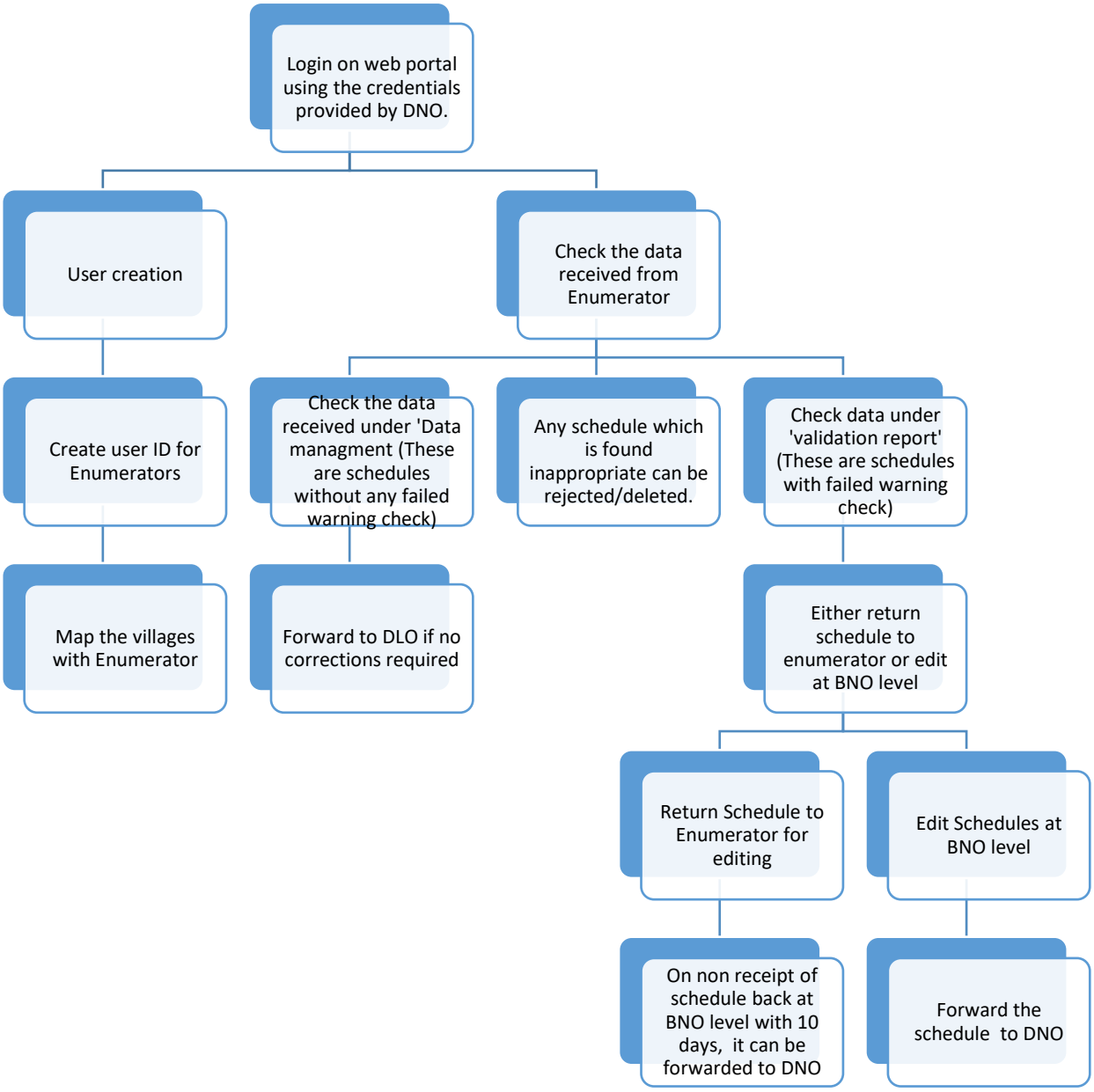
4.2.6 Block/Sub-District Level Officer has to assign officers for each Village before user creation on web application of the Census. While user creation on the web application, email of the Enumerator for whom the login ID is created has to be entered.

4.2.7 Each village will be assigned to a single enumerator in a given time ensuring that no village is assigned to multiple enumerators. But multiple villages may be assigned to a single enumerator. If there is any change of enumerator, then account may be re-assigned to the new enumerator. In cases where villages having a huge number of schemes, the work of enumerator may be limited to that village.

4.2.7.1 Scrutiny may be undertaken on schedules submitted by the enumerator and it may be returned to them for modifications required, if any. Norms for scrutiny is given under the scrutiny section. Apart from scrutiny, BLO may also undertake random field inspections to ensure the quality of data.

4.2.7.2 BLO will have the right to edit, revert, reject/delete schedules, functions which must be executed cautiously. A village is considered final when BLO forward the village schedule to DLO after validation and field inspection.

4.2.8 BLO Level Process Flow is given below:



4.2.8.1 Enumerator Level: Enumerator will access the mobile app after completing email OTP verification, which is required only upon the first login.

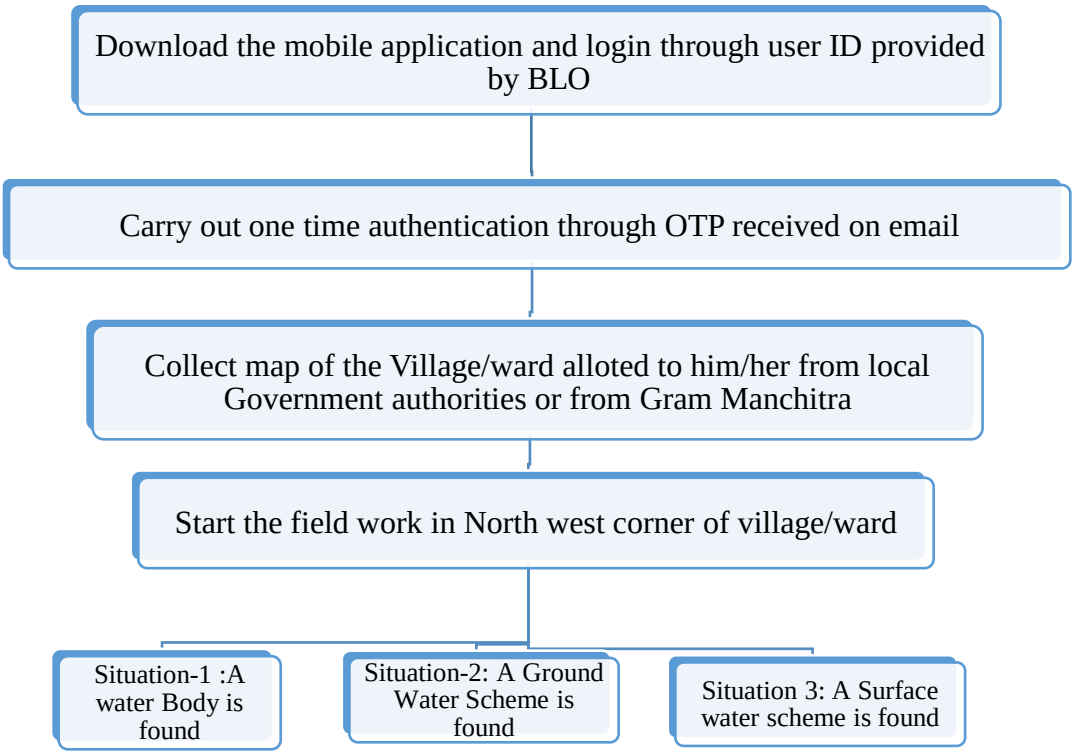
4.2.8.2 Before proceeding for data collection, he must be logged in to the mobile application, which requires a network connection. All waterbodies within the village need to be canvassed first, followed by canvassing surface water, ground water and village schedules. He has to record Lat/Long, identify the waterbody as per SAC database in the selected range and capture images of all schemes/ waterbodies through the mobile application.

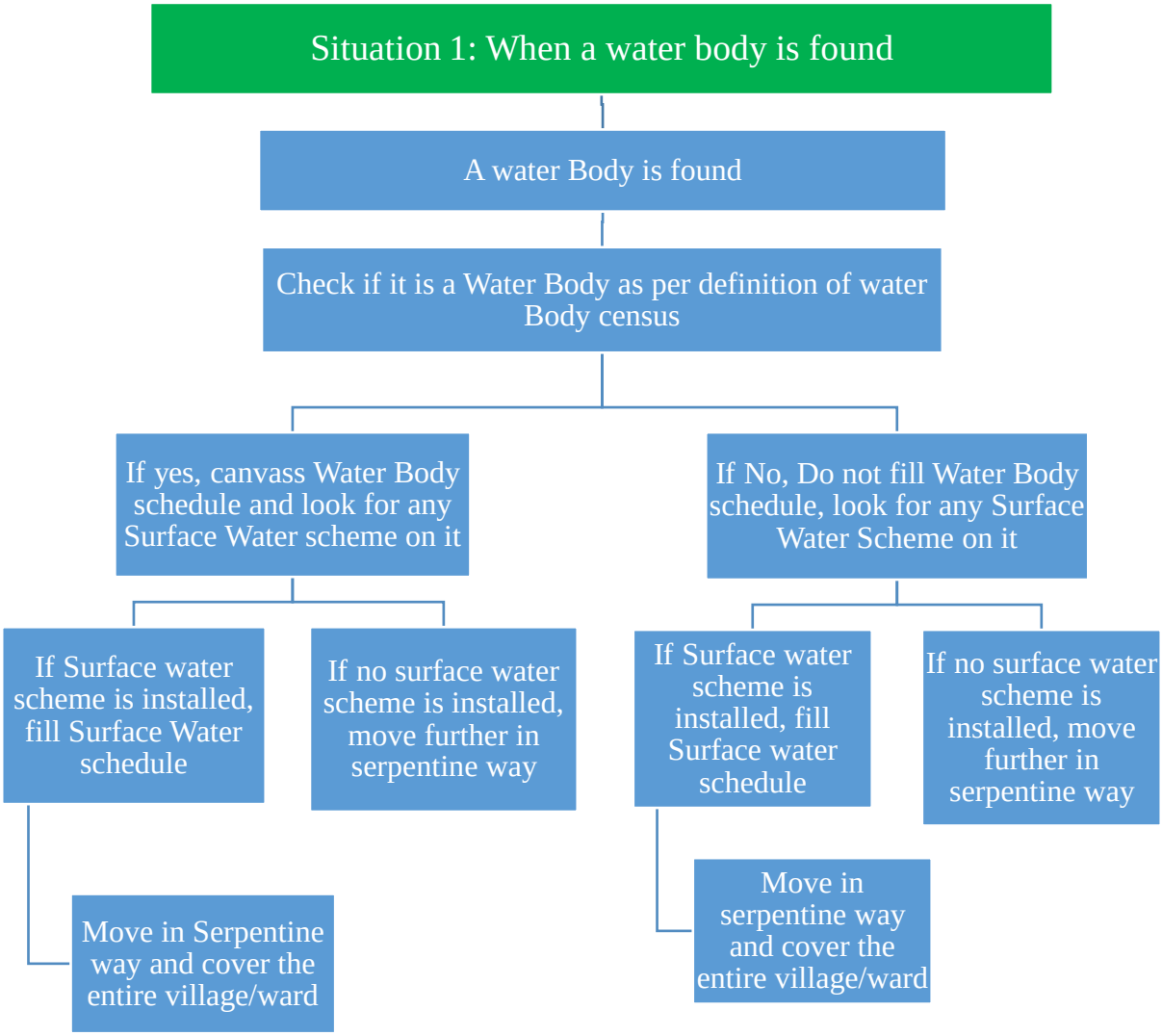
4.2.8.3 Lat/Long data of each village /ward has been mapped to the corresponding LGD codes of villages/wards. Therefore, while recording Lat/long of a particular scheme, if the enumerator is located at an invalid location (i.e the location which is outside the

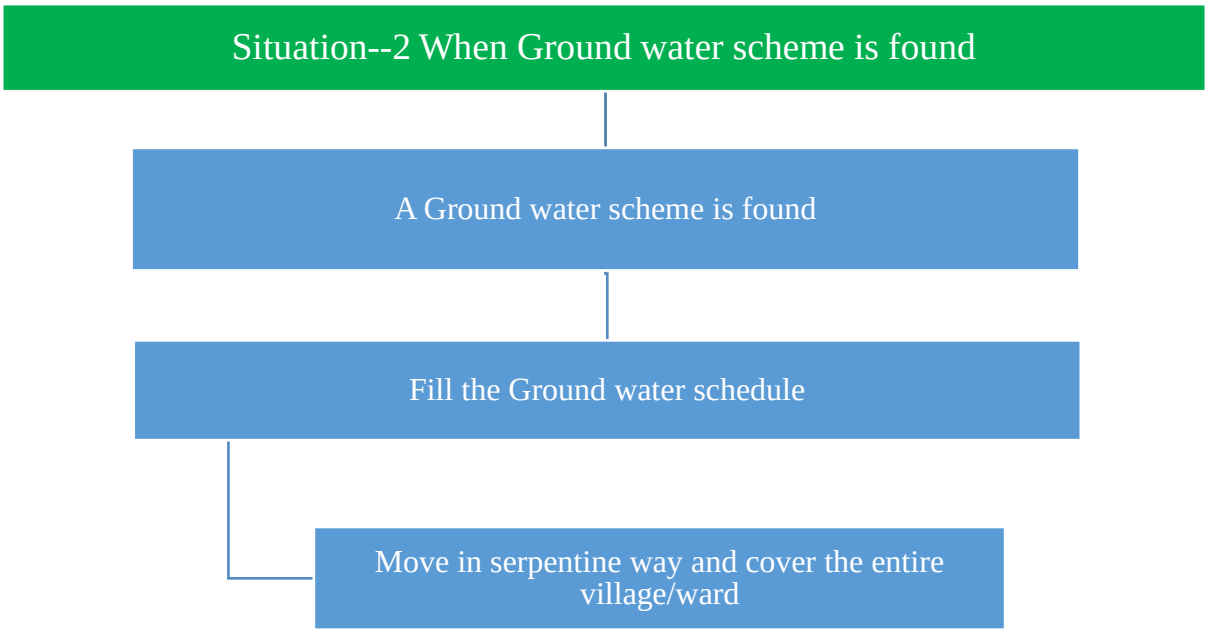
concerned village boundary), then he/she will not be allowed to proceed further in the mobile application. If enumerator is online, then he will be receiving a message indicating the same and he is required to again record the correct Lat/Long of the particular scheme. If the enumerator is offline, he will receive a message at the time of data synchronization. Schedules with an invalid location will not be synchronized and will remain on the mobile device. Then enumerator is required to correct the location and resubmit the schedule.

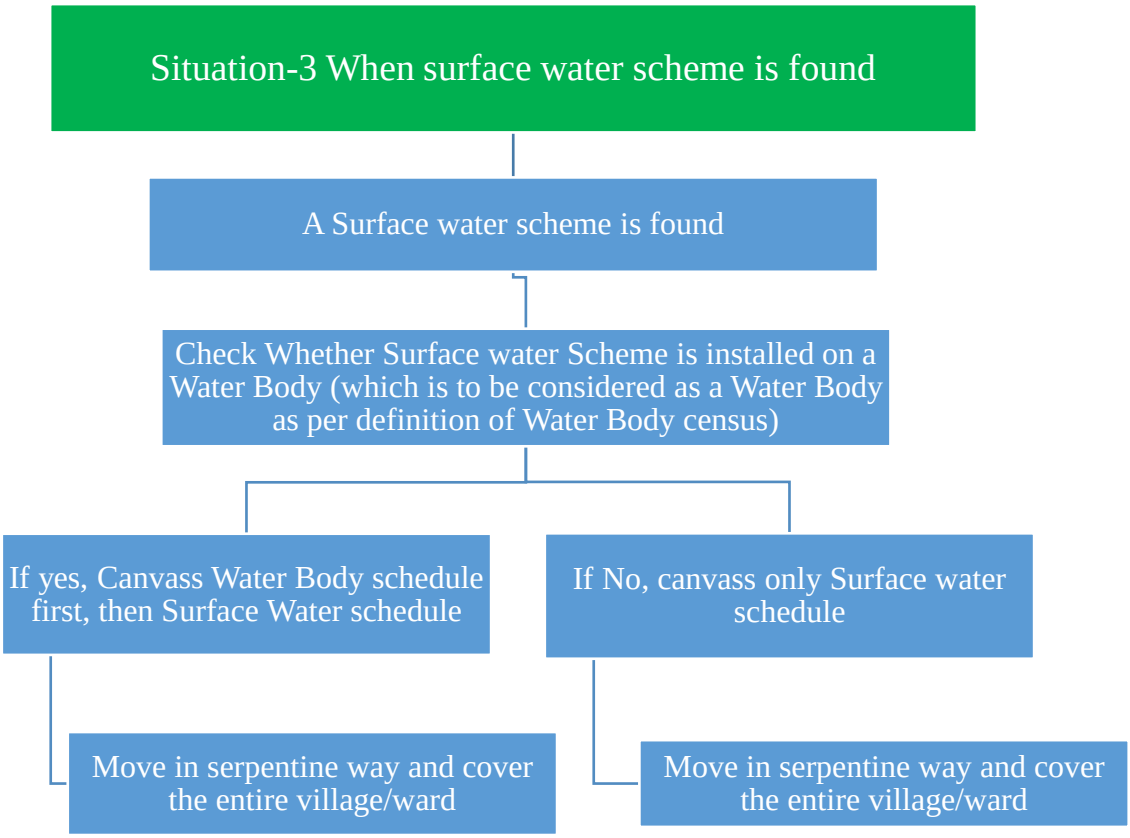
4.2.8.4 In order to ensure the boundary of the village, map of the village may be obtained from Block officials/or "Gram manchitra" application (https://grammanchitra.gov.in), where village/ward may be drilled down to get the required information.

4.2.8.5 Enumerator Level Process Flow is given below:


Download the mobile application and login through user ID provided by BLO
Carry out one time authentication through OTP received on email
Collect map of the Village/ward alloted to him/her from local Government authorities or from Gram Manchitra
Start the field work in North west corner of village/ward
Situation-1 :A water Body is found
Situation-2: A Ground Water Scheme is found
Situation 3: A Surface water scheme is found


Situation 1: When a water body is found
A water Body is found
Check if it is a Water Body as per definition of water Body census
If yes, canvass Water Body schedule and look for any Surface Water scheme on it
If No, Do not fill Water Body schedule, look for any Surface Water Scheme on it
If Surface water scheme is installed, fill Surface Water schedule
If no surface water scheme is installed, move further in serpentine way
If Surface water scheme is installed, fill Surface water schedule
If no surface water scheme is installed, move further in serpentine way
Move in Serpentine way and cover the entire village/ward
Move in serpentine way and cover the entire village/ward


Situation--2 When Ground water scheme is found
A Ground water scheme is found
Fill the Ground water schedule
Move in serpentine way and cover the entire village/ward



4.3 Field work:

4.3.1 The 7th MI Census as well as 2nd Census of Water bodies will be conducted under the overall charge of Census Commissioner who will be a Senior Officer of the Nodal department of State / UT concerned. The fieldwork will either be undertaken by the Nodal department itself or entrusted/ outsourced to some other agencies which the State/UT Government considers fit keeping in view infrastructure available with it under intimation to this office. However, for the entire Census operation, Census Commissioner of the State/ UT shall be the pivotal point as far as Government of India is concerned and would be entitled to draw the honorarium for the State Nodal Officer.

4.3.2 The primary work of collection of data will be carried out by the enumerators both in rural and urban areas (for water bodies). They may be village level workers or village accountants or Lekhpals or Patwaries or any other official designated by the State/UT Government in rural and urban area.

4.3.3 Before starting data collection, the enumerator must ensure they are logged into the mobile app, which requires a network connection. To ensure comprehensive data collection, enumerators need assistance from local authorities and Patwaris for identifying and locating all schemes within the village. The application will pre-populate schemes listed in the 6th MI Census and 1st Census of Waterbodies in those villages where LGD mapping has been successfully done. If pre-populated data is available, then enumerator will be allowed to either modify/update existing schemes or add new ones. If pre-populated data is not available, then enumerator will be able to add new schemes. Scheme-related schedules will be canvassed by enumerators through direct enquiries with scheme owners, while institutional schemes will be documented based on available administrative records. The Village Schedule will be canvassed using land/revenue records and inputs from village-level workers or grampradhans. The various particulars of the village, namely, tribal nature, geographical area, cultivable area etc. may be obtained from administrative records.

4.3.4 The primary enumerators, while canvassing the schedules, shall visit the owner of the water bodies or its next neighbour and collect information on the basis of personal enquiry from him. The information on waterbodies or MI schemes which are owned by govt. bodies shall be captured based on the available administrative records. The purpose of the Census would be explained to the farmers/ owners to win over their confidence in revealing the specific information in respect of water bodies as the case may be. Assurance that the data furnished by them would be kept confidential shall be given to the owners.

4.3.5 The primary enumerator should also find out from village officials / knowledgeable people / water use association, any new MI schemes which have started functioning and any new water bodies which have been created after 2017-18.

4.4 Scrutiny:

4.4.1 To improve the quality of data and complete the work in time, State officials at Tehsil

(sub-district) / Block / District / State Headquarter as well as officers at the Centre should undertake regular field visits/inspections during data collection period and interact with field functionaries.

4.4.1.1 At BLO level: BLO can forward the village schedules which are not having any failed warning checks to DLO. However, all scheme schedules in a particular village, where warning checks have been failed, need to be scrutinized by BLO. The village schedule which has been forwarded by BLO to DLO is considered final.

4.4.1.2 If BLO returns a schedule to enumerator for editing but enumerator does not return this schedule to BLO within 10 working days, then BLO can forward the schedule to DLO after making corrections, if required. Thereafter, there will not be any option for editing this schedule with enumerator. A message shall appear to enumerator 'Editing not allowed-the schedule has been sent to District Level Officer'. Apart from scrutiny, BLO may also undertake field inspection.

4.4.2 At DLO level: The district level officer must visit at least 5 villages in 5 separate blocks to physically verify the quality and coverage of the MI Schemes and water body schedules.

4.4.3 Once schedule has been submitted by BLO to DLO, scrutiny may be done simultaneously by DLO/State/Central officials. The schedule will be available in the accounts of DLO/SLO/Central users and they will have the option to revert back to the BLO level, if required. If a schedule has been reverted back to BLO by DLO, the same will be available to all higher levels with a remark saying that the schedule has been reverted back to BLO. In such cases State and Central level may not be able to again revert the said schedule back to BLO. At Central level, the data collected will be scrutinized on random basis and observations/ queries thereon would be referred to States/ UTs for possible corrections/clarification. After completion of census and finalization of data, the tabulated reports will be available to States for generating micro level tables as per their requirement.

4.5 Progress Monitoring

4.5.1 The progress of Irrigation Census operations will be monitored on real time basis through web portal (dashboard). A dedicated team at the Centre as well as State/UT Headquarter would proactively monitor the progress of work and resolve issues, if

any, on priority basis. In order to strengthen the monitoring system, multi-layer monitoring system would be adopted at Centre/ State/ District, Sub-district (Tehsil)/Block level.

4.5.2 At Block level, the BLO will have access to the Dashboard that displays the list villages categorized as completed, not started or in progress. At district level, the DLO will be able to view the status of all blocks assigned to them, as well as the status of specific blocks and the villages within those blocks. At State level, the SLO will have access to the dashboard that displays status of all Districts as well as status of specific districts and the blocks and villages within those districts. At Centre level, the Dashboard will display status of all States, specific States and Districts/Blocks/Villages within those States. The Dashboard will also display the total number of Schemes canvassed in each Village/Block/District/ State at respective logins of Block, District, State and Centre users.

4.6 TENTATIVE SCHEDULE OF THE CENSUSES

1.	Release of Central grant by the Centre	:	As and when demanded by States/UTs
2.	All India Training Workshop	:	August 2023
3.	Pilot testing of mobile app	:	October 2024
4.	Six Regional Training Workshops	:	December 2024 – January 2025
5.	State /District Training programmes	:	March 2025
6.	Start of field work of census on ground	:	April 2025
7.	Cleaning, validation and scrutiny of data	:	April 2025 to September 2025
8.	Examining of tables by Central Ministry	:	October 2025 to December 2025
9.	Publication of Key Results	:	March 2026
10	Final Report drafting and Publication	:	June 2026

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CHAPTER FIVE:

INSTRUCTIONS FOR USING WEB AND MOBILE APPLICATION

5.0 INSTRUCTIONS FOR USING WEB/ MOBILE APPLICATION

5.1 USE OF WEB APPLICATION

5.1.1 Introduction

This user manual provides a step-by-step guide for managing user roles and village mappings within the MI Census application. The platform enables efficient data collection and management through a hierarchical user system, where different user types (Super Admin, State User, District User, Block User, Town User, and Enumerator) are assigned specific roles and permissions to manage and update census-related data.

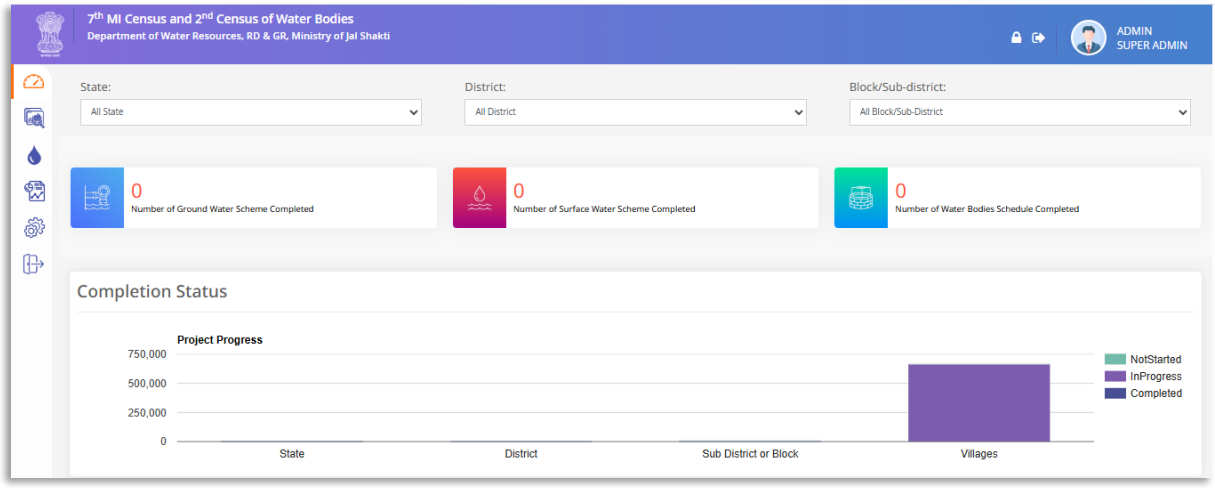
This manual is organized to provide clear, concise instructions for each user role, helping ensure the efficient use of the MI Census application for data management and village mapping tasks.

- Navigate to the URL "https://wrcensus.mowr.gov.in/"

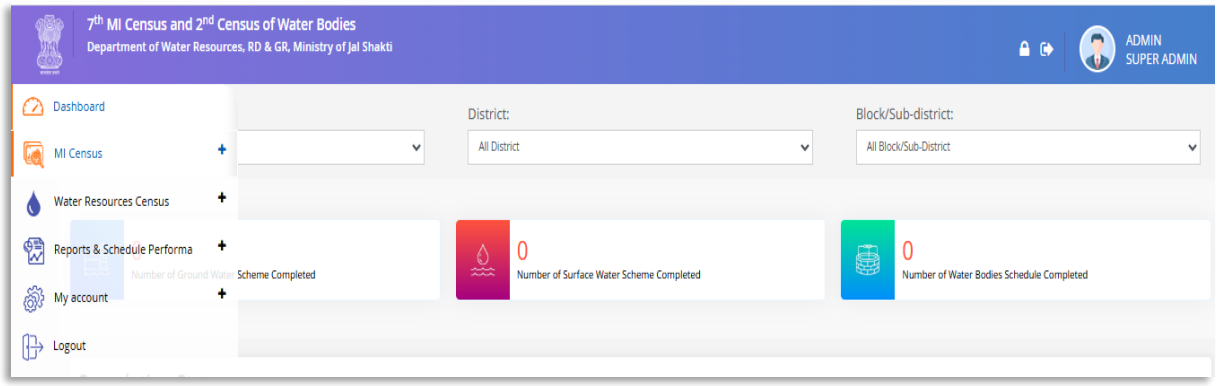
- Click on Minor Irrigation and Water Body Census tab, related login screen will appear

5.1.2 Super Admin

- Enter login credentials of Super Admin
- Upon successful login, the application dashboard will be displayed.



- **Navigation Menu:** Followings are the left navigation menus

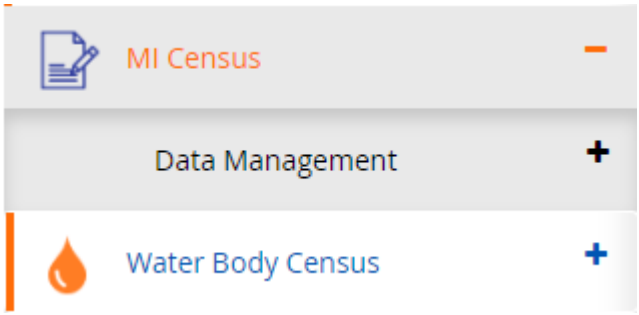


➢ The **Super Admin** has access to view data for the following categories:-

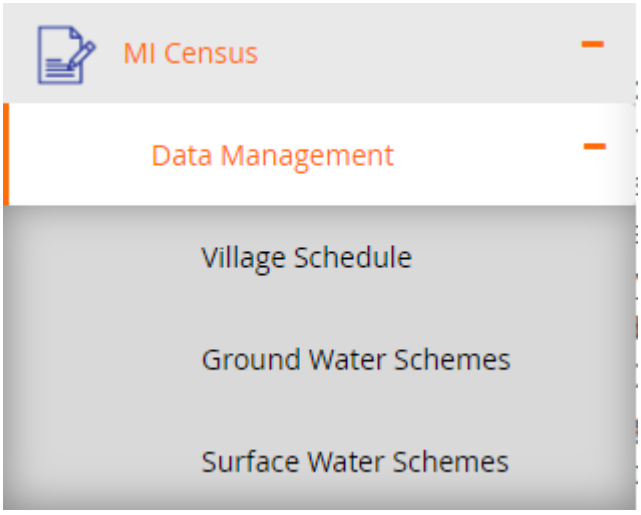
i. **Village Schedule**
ii. **Ground Water Schemes**
iii. **Surface Water Schemes**
iv. **Urban Schedule**
v. **Water Body**

Village Schedule

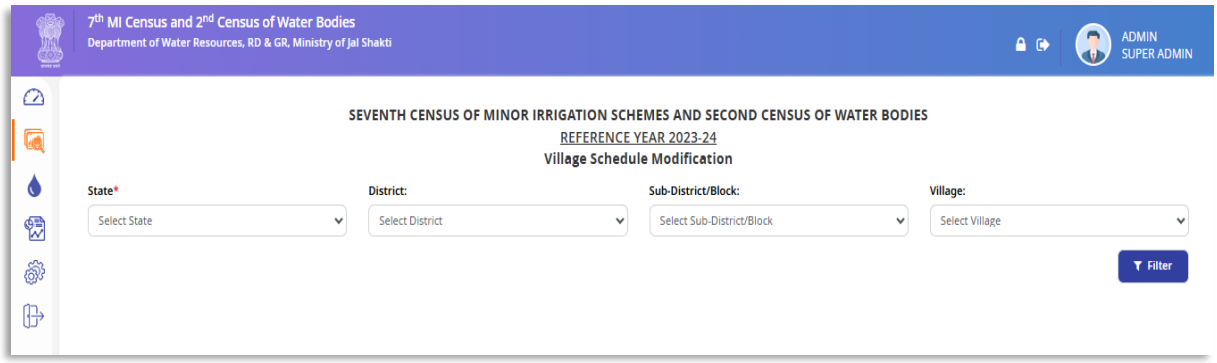
➢ Click on the plus icon next to the "MI Census" menu. This will display the sub-menu "Data Management"



➢ Click on the plus icon next to "Data Management"



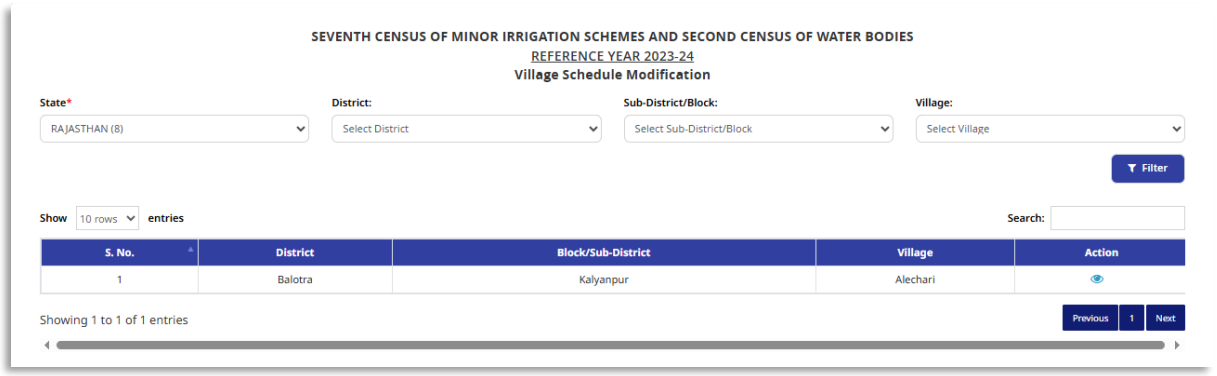
➢ Select "Village Schedule" from the options. The following screen will appear



- On the screen four filters are provided: -
    - State
    - District
    - Block/Tehsil
    - Village

- The filters work in a hierarchical manner:
    - Based on the selected State, the available Districts will be displayed.
    - Based on the selected District, the available Blocks/Tehsils will be displayed.
    - Based on the selected Block/Tehsil, the available Villages will be displayed.

- Select a State (this is mandatory).
- Click on the Filter button. Records will be displayed according to the selected state and any other applied filters.



- The displayed records are those synchronized from the mobile application, Click on view to view the data report

Village Schedule Report Data

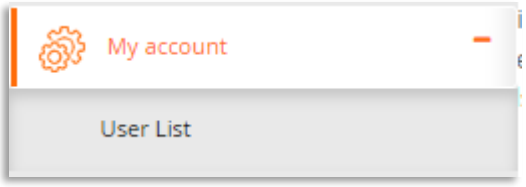
I. Identification Particulars:		
(a) State:*	**(b) District:***	**(c) Block/Sub-District:***
RAJASTHAN	Balotra	Kalyanpur
(d) Village:*	**Date of Enumeration: (DD/MM/YY)***	
Alechari	Mar 24, 2025	
II. Specific Information:		
1. Is Village Tribal/ Non-Tribal?	**2. (a) Is the Village covered by Major/ Medium Scheme***	**2. (b) If yes, Name of Major/ Medium Scheme**
Tribal	Yes	falcon
3. Geographical Area In Whole No. Ha.	**4. Cultivable Area In Whole No. Ha.**	**5. Net sown Area In Whole No. Ha.**
4	4	4
6. Gross Irrigated Area(By all sources)In Whole No. Ha.		
(i) During Kharif Season In Whole No. Ha.	**(ii) During Rabi Season In Whole No. Ha.**	**(iii) For Perennial crops In Whole No. Ha.**
1	1	1
(iv) During Other Season In Whole No. Ha.	**(v) Total Gross Area Irrigated Ha.**	
1	4	
7. Net Area Irrigated (By all sources) In Whole No. Ha.		
4		

- Only Block user can edit these records.

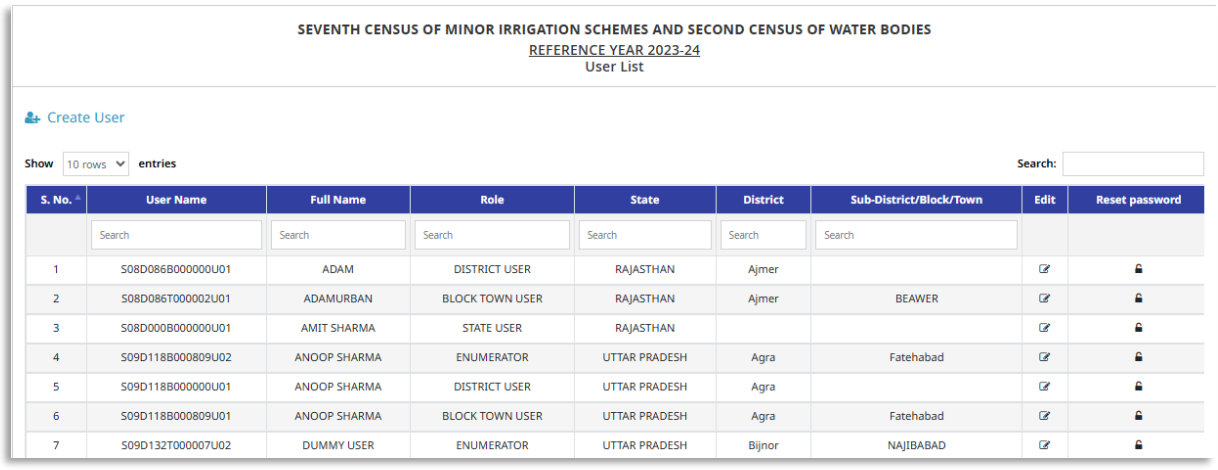
Note:- The same workflow applies to other schedules, as described above for the Village Schedule module.

User List

- Click on the plus icon next to the "My Account" menu. This will display the sub-menu "User List"

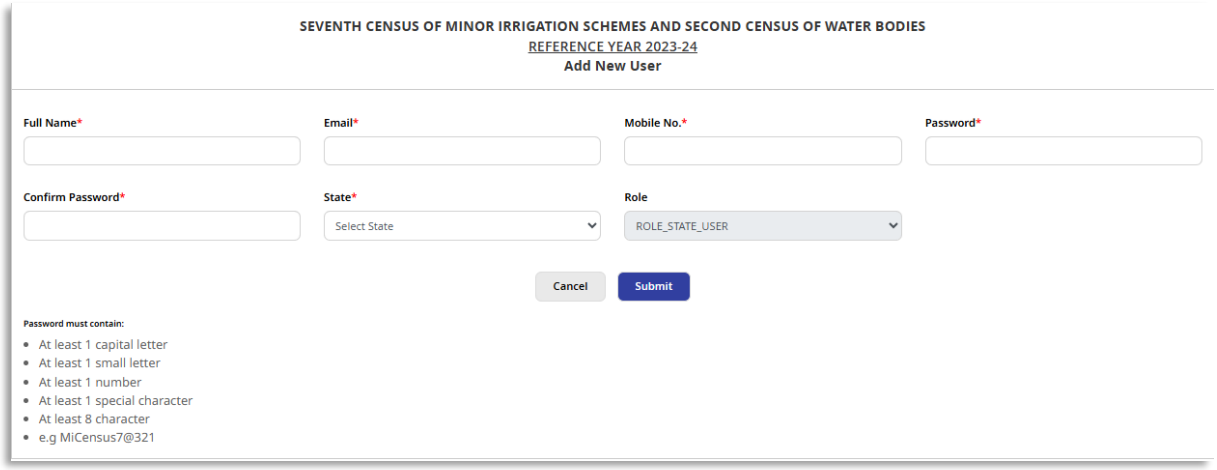


- Select "User List". The following screen will appear

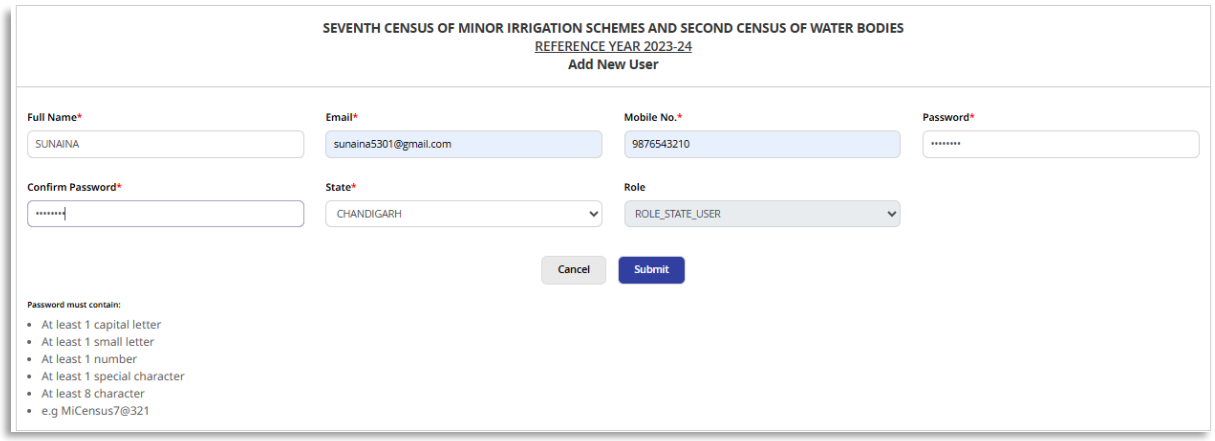


S. No.	User Name	Full Name	Role	State	District	Sub-District/Block/Town	Edit	Reset password
	Search	Search	Search	Search	Search	Search		
1	S08D086B000000U01	ADAM	DISTRICT USER	RAJASTHAN	Ajmer			
2	S08D086T000002U01	ADAMURBAN	BLOCK TOWN USER	RAJASTHAN	Ajmer	BEAWER		
3	S08D000B000000U01	AMIT SHARMA	STATE USER	RAJASTHAN				
4	S09D118B000809U02	ANOOP SHARMA	ENUMERATOR	UTTAR PRADESH	Agra	Fatehabad		
5	S09D118B000000U01	ANOOP SHARMA	DISTRICT USER	UTTAR PRADESH	Agra			
6	S09D118B000809U01	ANOOP SHARMA	BLOCK TOWN USER	UTTAR PRADESH	Agra	Fatehabad		
7	S09D132T000007U02	DUMMY USER	ENUMERATOR	UTTAR PRADESH	Bijnor	NAJIBABAD		

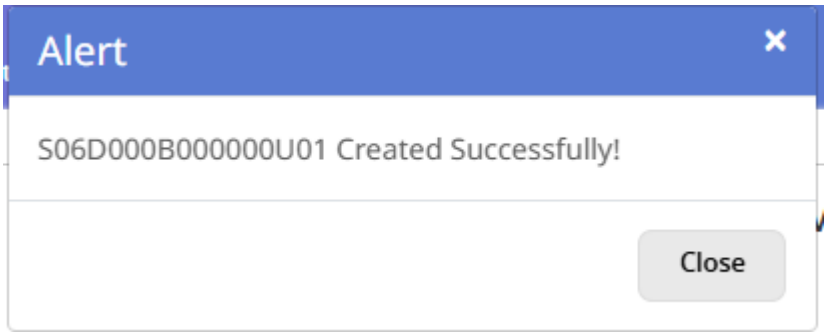
- The Super admin has access to view the list of all users including State, District,Block and Enumerator users
- The Super Admin can only create State Users.
- To add a new user, click on the “Create User” link



- Fill out the mandatory fields



- Click on the Submit button. A success message will be displayed



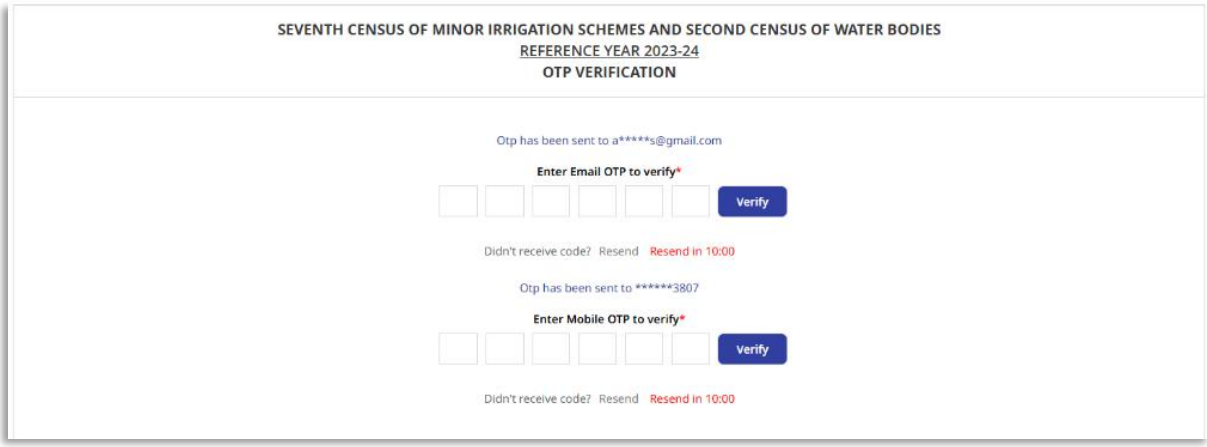
- The user is successfully created with the user ID: S06D000B000000U01. Here's the breakdown of the user ID:
  - **S** stands for **State**.

- **06** is the **State Code**.
- **D000** indicates that this is not a District user.
- **B000000** indicates that this is not a Block user.
- **U01** is the running number, indicating the first user created for this state.

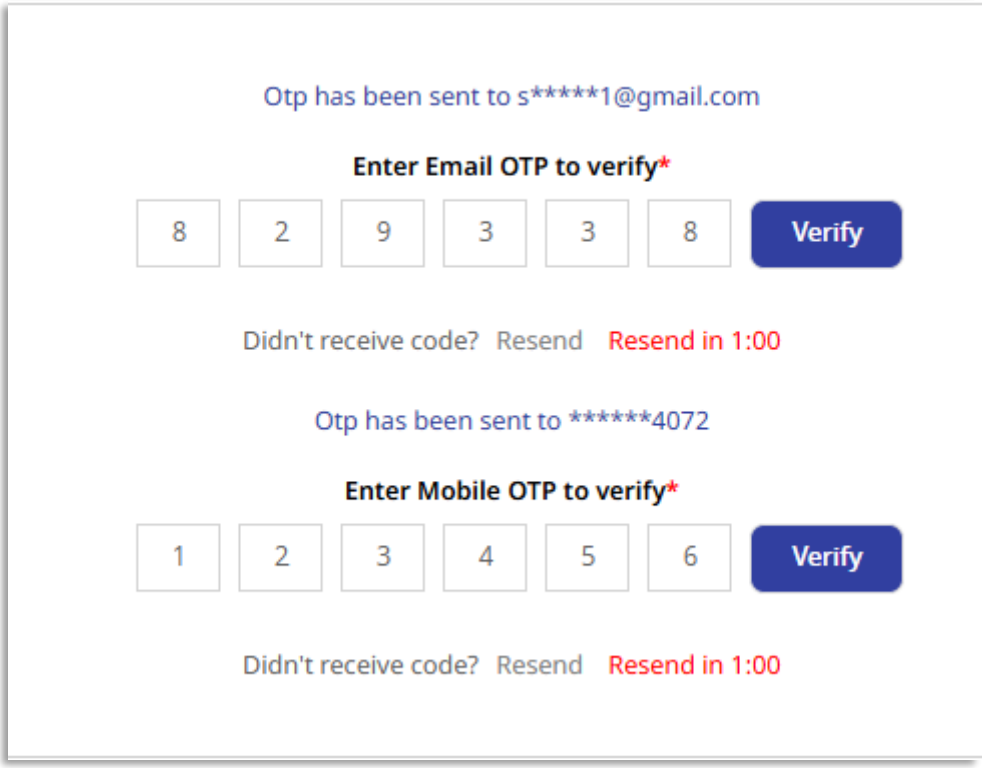
This user is a **state user** only.

5.1.3 State User Login

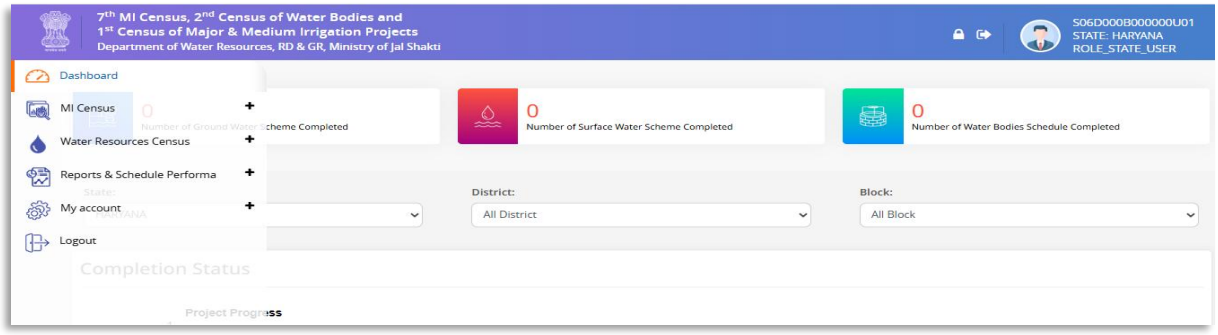
➢ **Login** using the credentials of the State User created earlier. OTP verification screen will be displayed



➢ Enter the OTP received on your registered email and mobile number, which were provided during the creation of the State User.

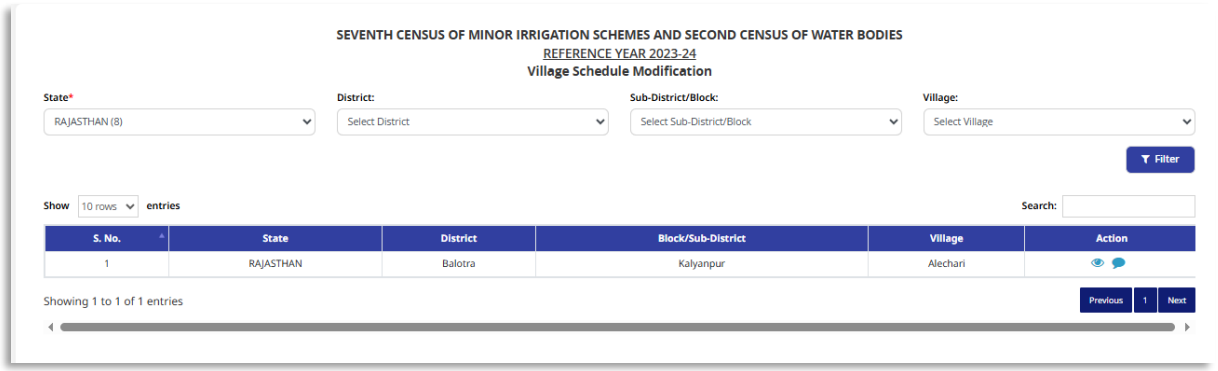


- Click on Verify
- The **Dashboard** will be displayed.

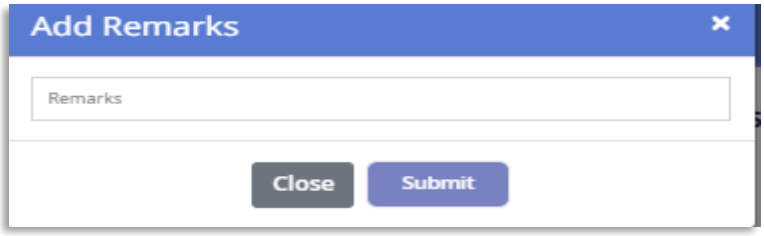


- The **State user** has access to view data and add remarks for the following categories, but only for the state to which the logged-in user belongs:

  - **Village Schedule**
  - **Ground Water Schemes**
  - **Surface Water Schemes**
  - **Water Body**



- Click on View icon to view the data report.
- Click on Remark icon to add the remarks

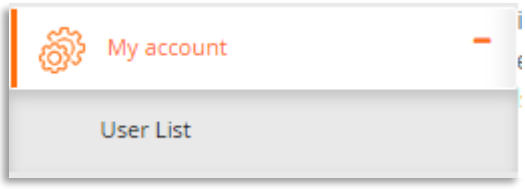


- Enter Remarks
- Click on Submit button, remarks will appear at Block user under Project Monitoring -> Village Revert Back

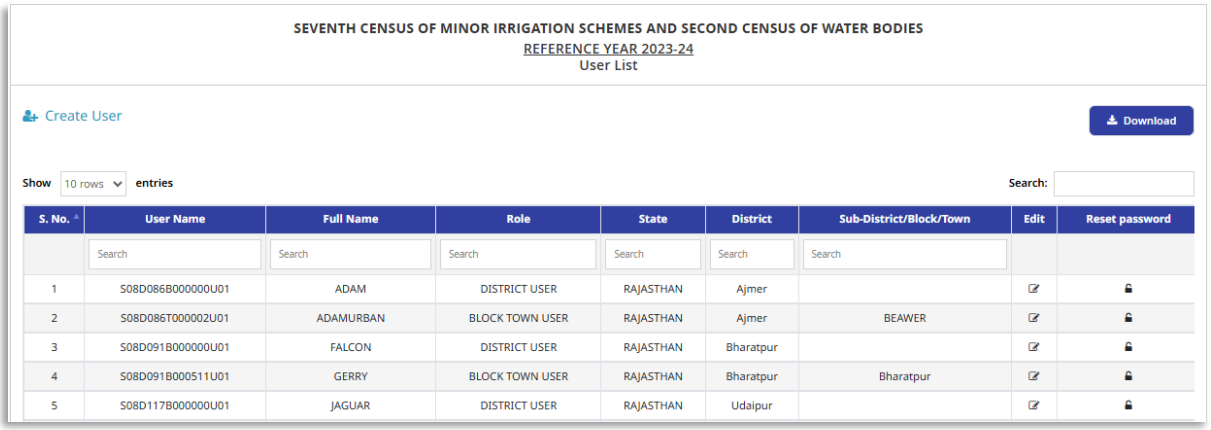
This access is restricted to the user's specific state.

User List

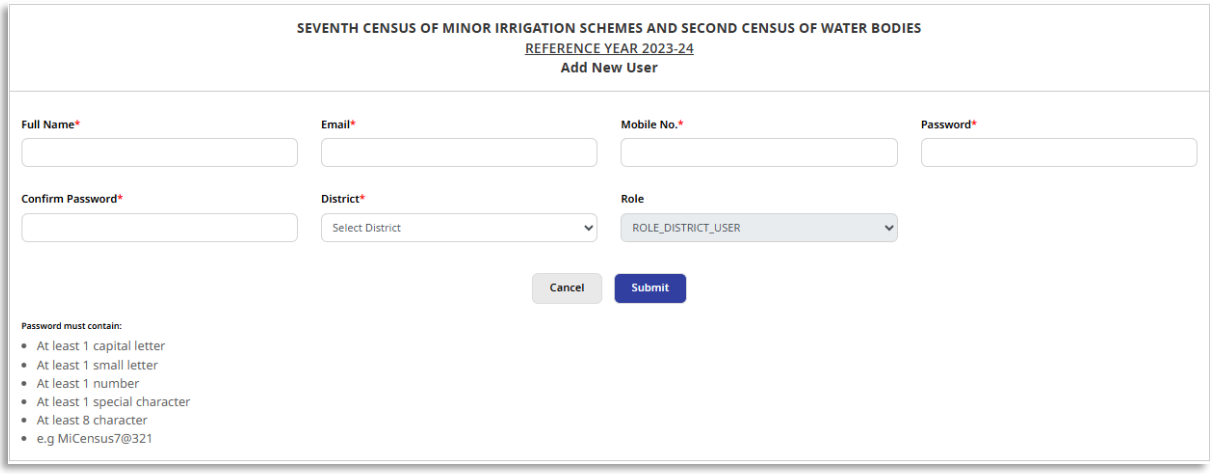
- Click on the plus icon next to the "My Account" menu. This will display the sub-menu "User List"



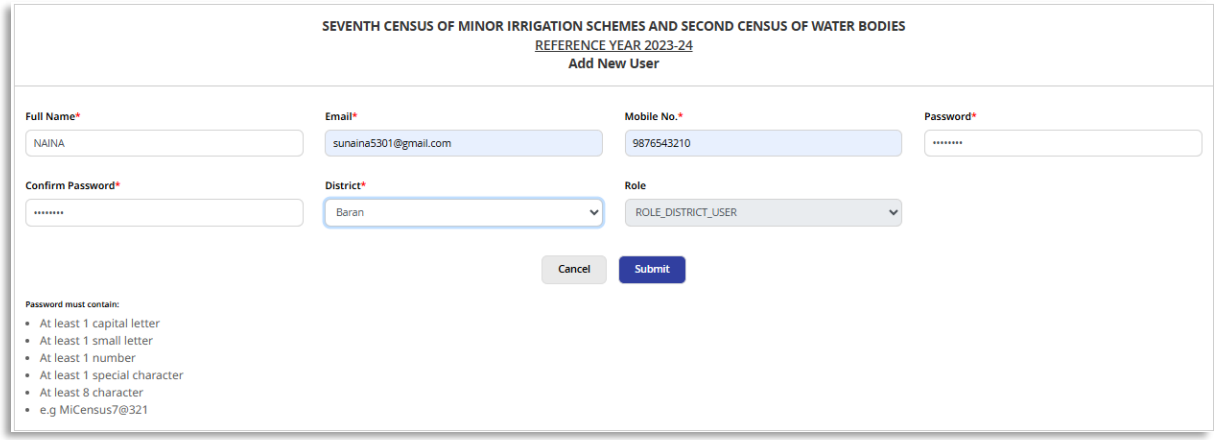
- Select “User List”. The following screen will appear



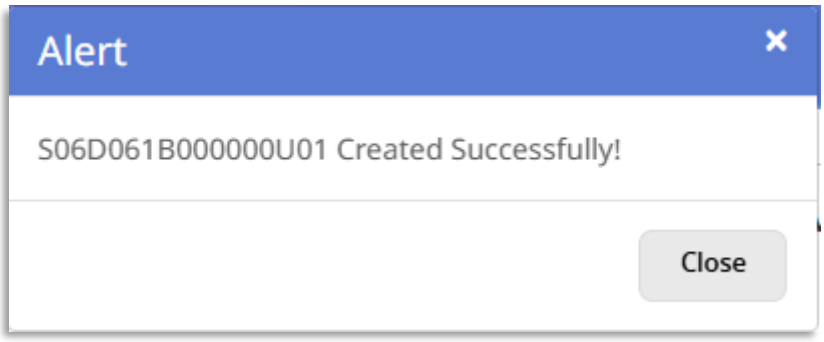
- The State User has access to view the list of all users (District, Block and Enumerator users) but only for the specific state to which the logged-in user belongs.
- The State User can only create District Users of that same state
- To add a new user, click on the “Create User” link



- Fill out the mandatory fields



➢ Click on the Submit button. A success message will be displayed



➢ The user is successfully created with the user ID: S06D061B000000U01. Here's the breakdown of the user ID:

- **S** stands for **State**.
- **06** is the **State Code**.
- **D061** indicates that this is a District user and 061 is **District** code.
- **B000000** indicates that this is not a Block user.
- **U01** is the running number, indicating the first district user created for this District.

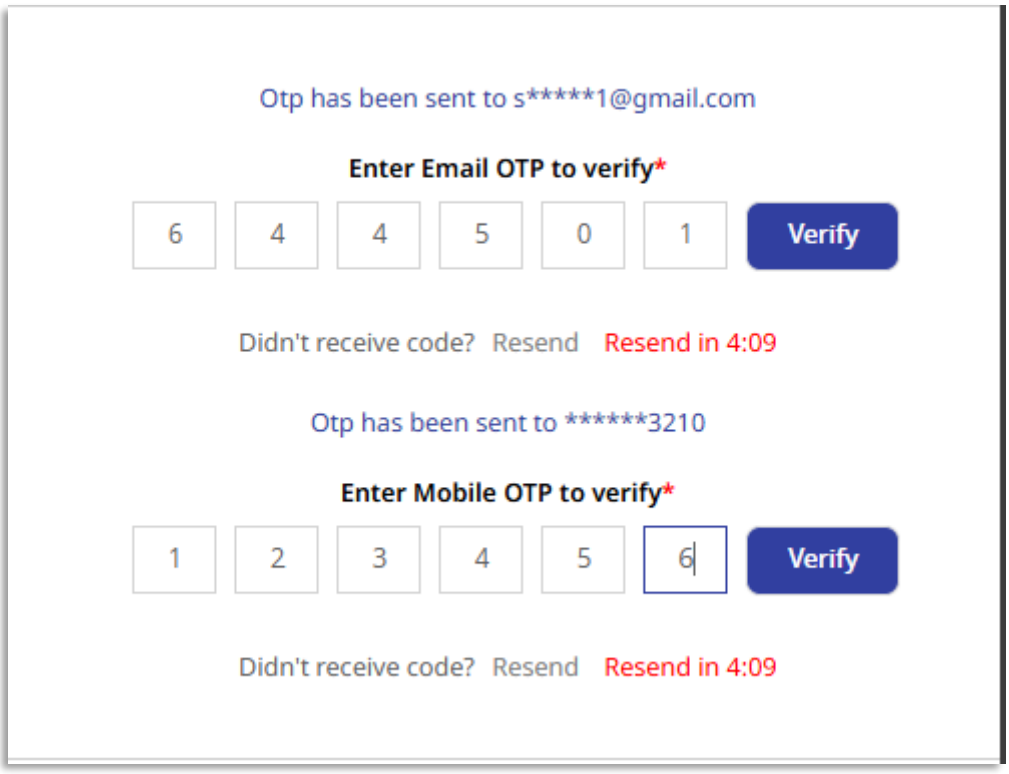
This user is a **District user** only.

➢ Now login with District User with the credentials entered during user creation form

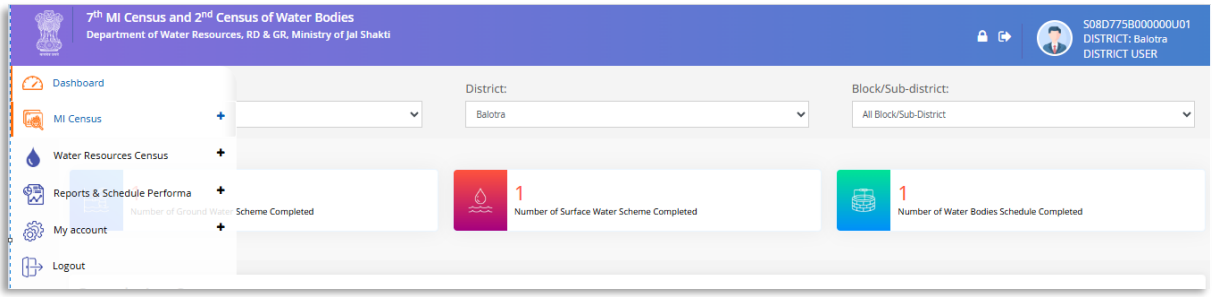
5.1.4 District User Login

➢ **Login** using the credentials of the District User created earlier. OTP Verification screen will be displayed

➢ Enter the OTP received on your registered email and mobile number, which were provided during the creation of the District User.



➢ The **Dashboard** will be displayed.

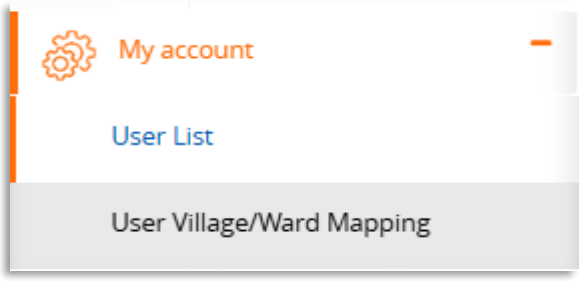


➢ The **district user** has access to view data and add remark for the following categories, but only for the district to which the logged-in user belongs:

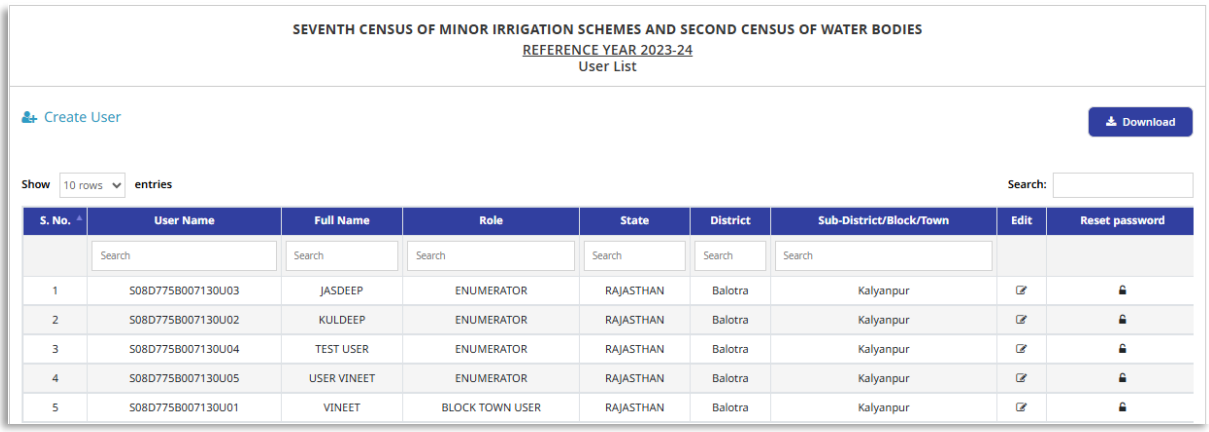
- **Village Schedule**
- **Ground Water Schemes**
- **Surface Water Schemes**
- **Water Body**

User List

➢ Click on the plus icon next to the "My Account" menu. This will display the sub-menu "User List"



➢ Select "User List". The following screen will appear

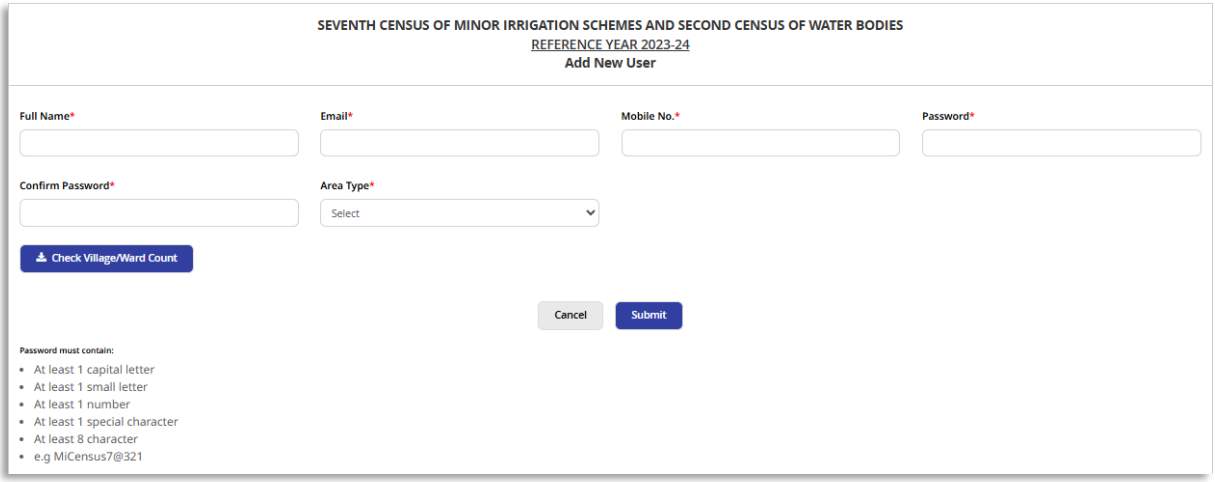


➢ The District User has access to view the list of all users (Block/Town and Enumerator users) but only for the specific district to which the logged-in user belongs.

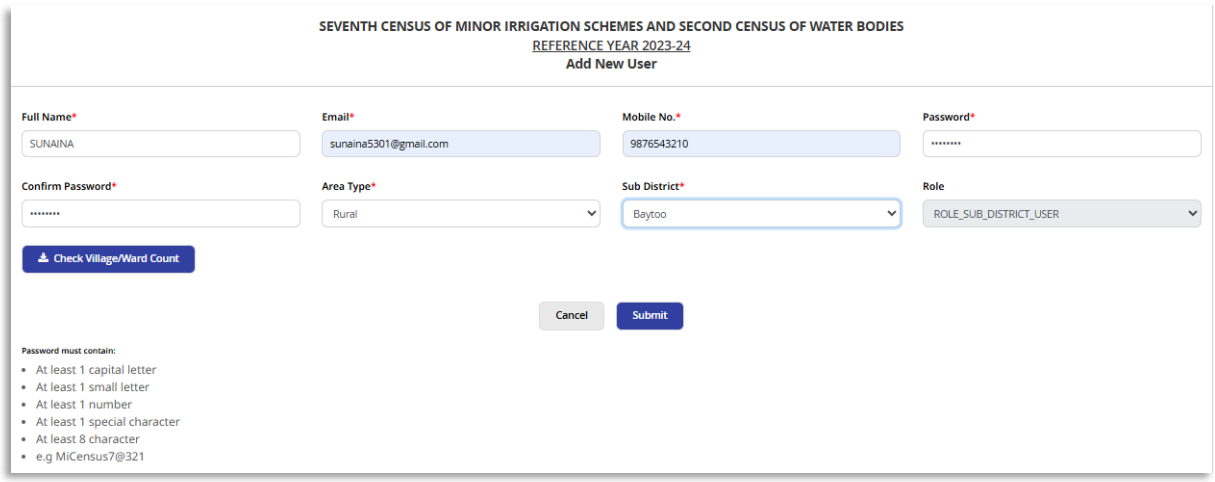
➢ The District User can create Block/Tehsil and Town/Municipality Users, depending on the selected Area Type:

- If the Area Type is **Rural**, only **Block/Tehsil** users can be created.
- If the Area Type is **Urban**, only **Town/Municipality** users can be created.

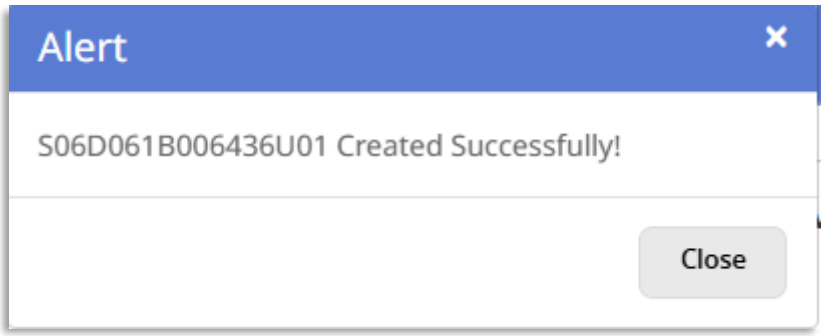
➢ To add a new user, click on the "Create User" link



➢ Fill out the mandatory fields



➢ Click on the Submit button. A success message will be displayed



➢ The Block user is successfully created with the user ID: S06D061B006436U01. Here's the breakdown of the user ID:

- **S** stands for **State**.
- **06** is the **State Code**.
- **D061** indicates that this is a District user and 013 is District code
- **B006436** indicates that this is a Block user.
- **U01** is the running number, indicating the first block user created for this Block.

This user is a Block **user** only.

The **"Check Village/Ward Count"** link is provided to view the list of villages and wards.

Village and Ward count

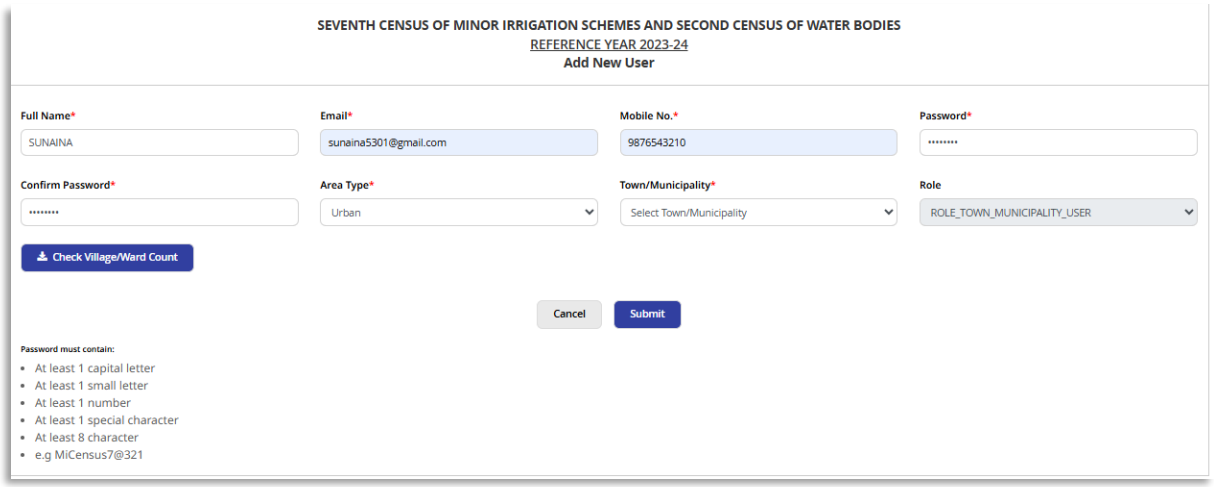
Rural		
S.No	Block Tehsil Name	Number of Villages
1	BALODABAJAR	150
2	SIMGA	128
3	BILAIGARH	223
4	PALARI	133
5	BHATAPARA	113
6	KASDOL	214

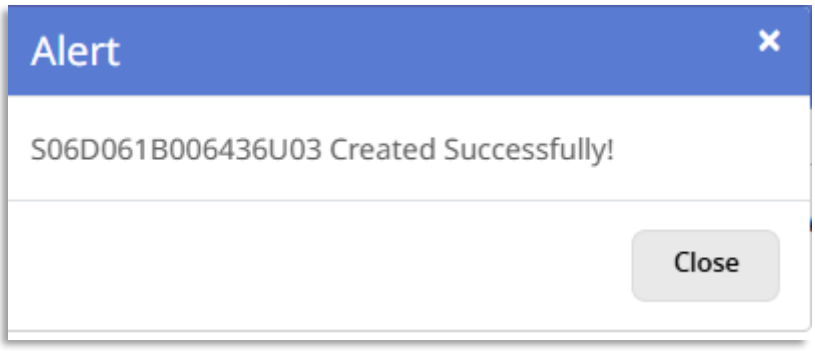
Urban		
S.No	Town Municipality Name	Number of wards
1	BALODABAJAR	21
2	LAWAN	15
3	PALARI	15
4	BHATAPARA	31
5	SIMGA	15
6	BILAIGARH	15
7	BHATGAON	15

The number of Block/Town users that can be created is based on this count:

- For up to **50 villages/wards**, only **one user** can be created.
- For more than **50** and up to **100 villages/wards**, up to **two users** can be created.
- This pattern continues accordingly.

➢ To create the Town user, select Area Type as Urban





- The Town user is successfully created with the user ID: S06D0613B006436U03. Here's the breakdown of the user ID:

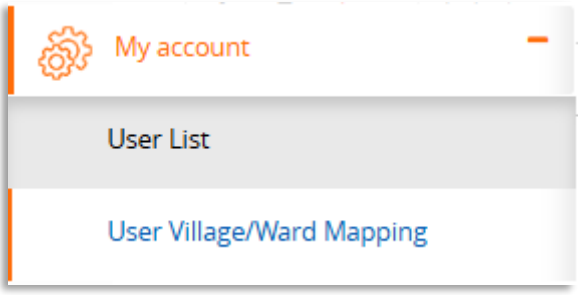
  - **S** stands for **State**.
  - **26** is the **State Code**.
  - **D013** indicates that this is a District user and 013 is District code
  - **T000003** indicates that this is a Town user.
  - **U01** is the running number, indicating the first Town user created for this Town.

This user is a Town **user** only.

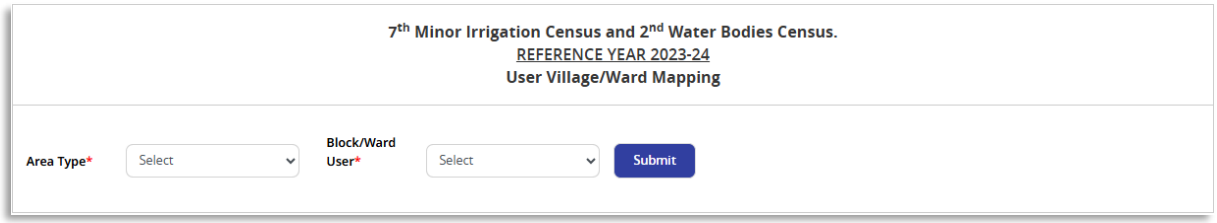
- Now login with Block User with the credentials entered during user creation form

User Village/Ward Mapping

- Click on the plus icon next to the "My Account" menu. This will display the sub-menu "User List" and "User Village Mapping"

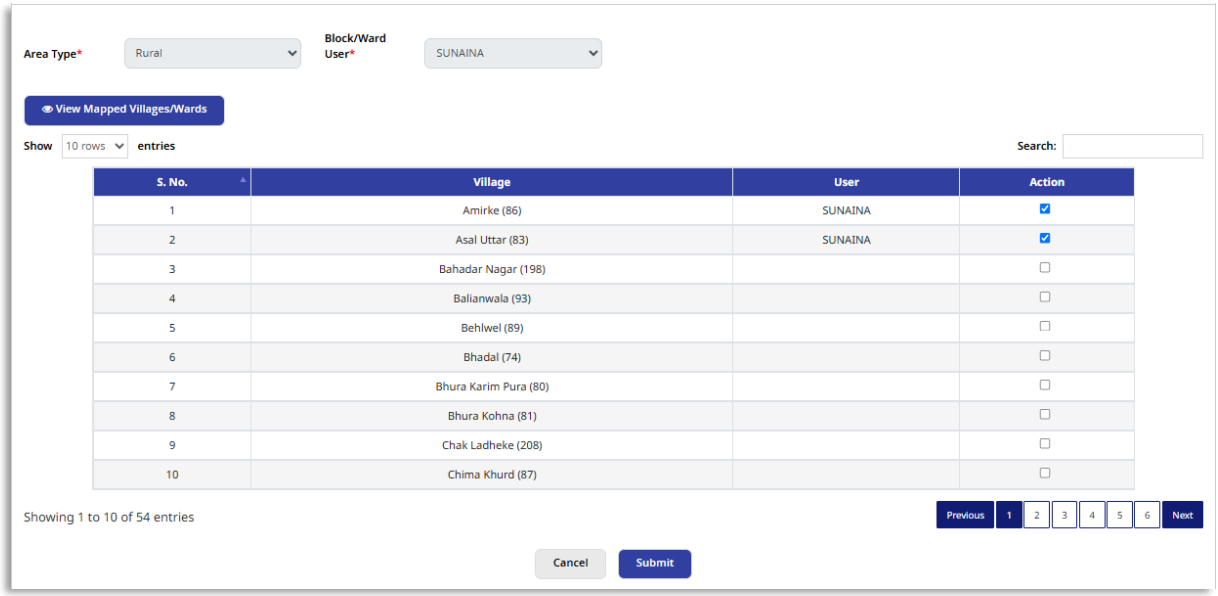


- Select "User Village/Ward Mapping". The following screen will appear



- Select Area Type
- Select Block/Ward User
- Click the Submit button, and a list of Villages will be shown

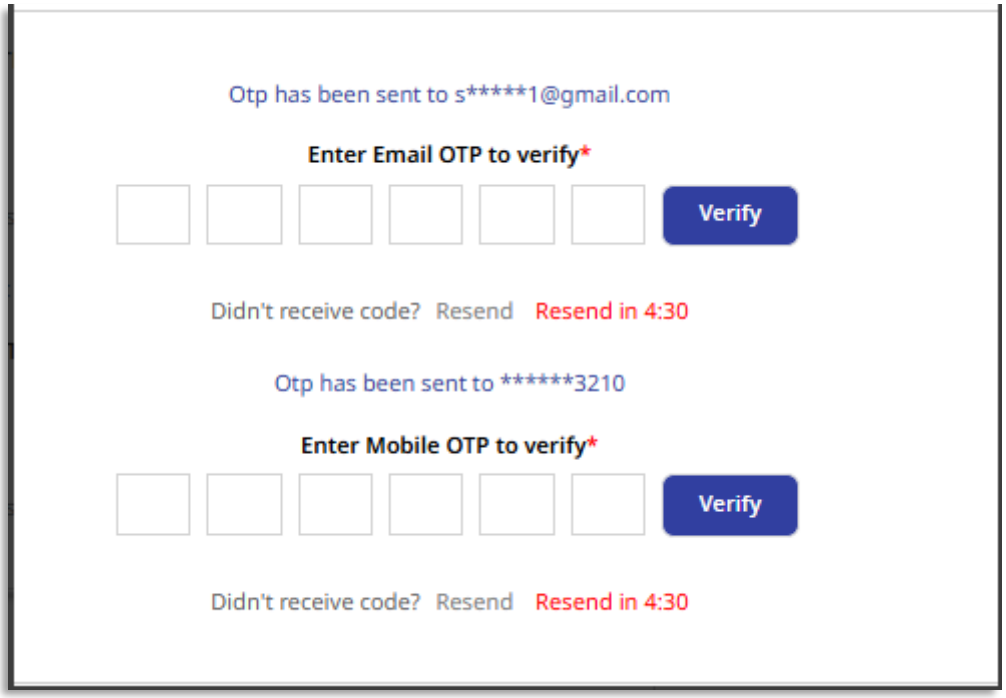
- Check the boxes next to the Villages you wish to map to the selected Block user.
- After selecting the Villages, click the **Submit** button to complete the mapping process.
- To edit the existing Mapping, select the user again
- Click the Submit button to display the current village mapping.



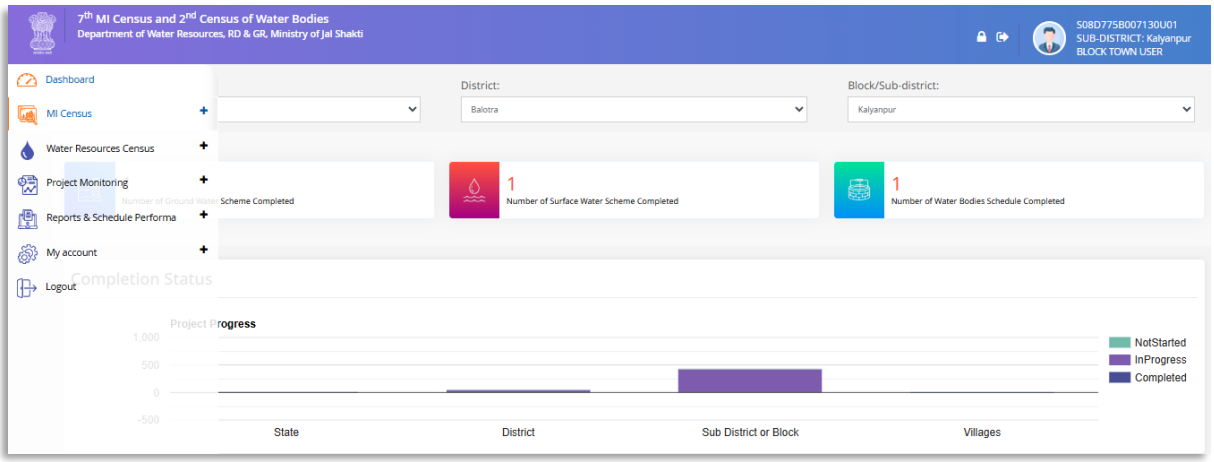
- To modify the mapping, you can either:
  - **Uncheck** the boxes for villages you wish to un map.
  - **Check** new boxes for villages you want to add to the mapping.
- After making your changes, click the **Submit** button to update the mapping.

5.1.5 Block User Login

- **Login** using the credentials of the Block User created earlier. OTP verification screen will display.



- Click on Verify to verify the OTP
- The **Dashboard** will be displayed.

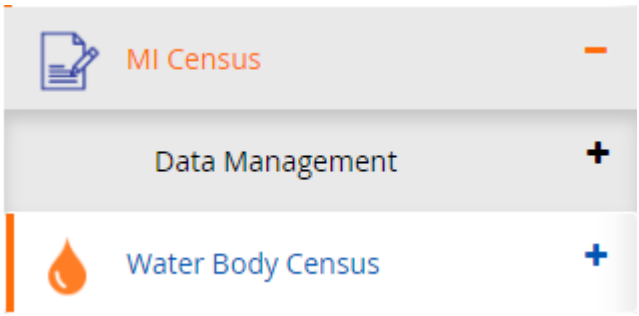


- The **Block user** has access to edit data for the following categories, but only for the block to which the logged-in user belongs:

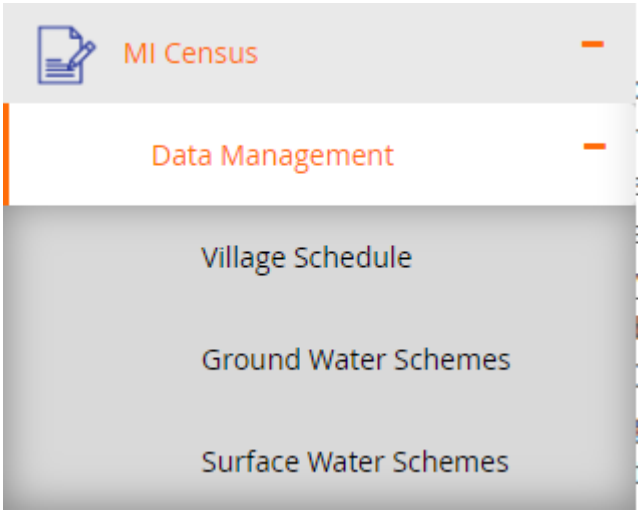
  - **Village Schedule**
  - **Ground Water Schemes**
  - **Surface Water Schemes**
  - **Water Body**

Village Schedule

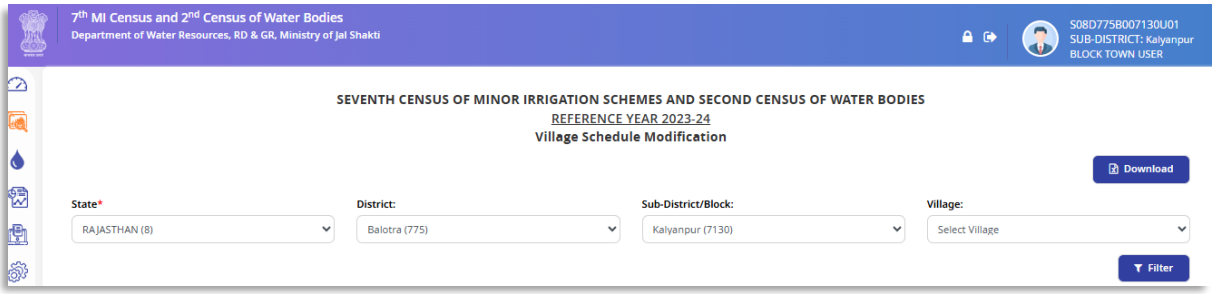
- Click on the plus icon next to the "MI Census" menu. This will display the sub-menu "Data Management”



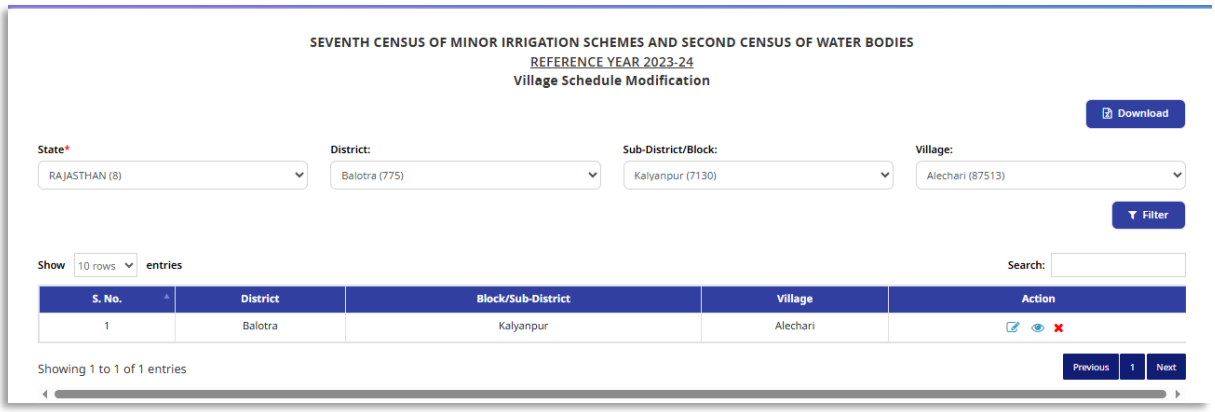
- Click on the plus icon next to “Data Management”



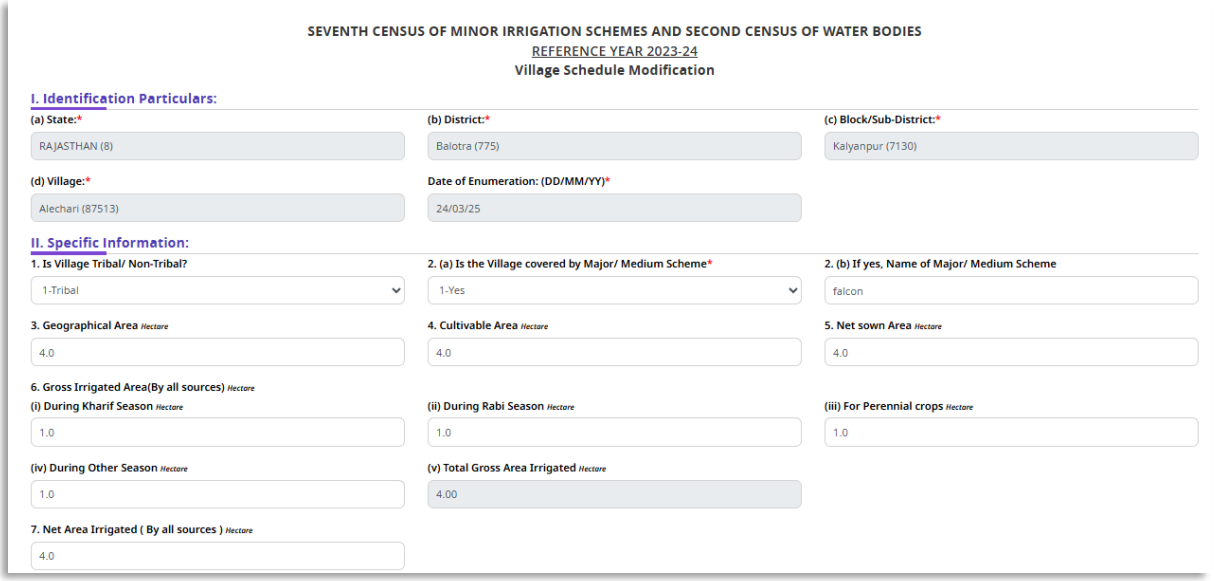
- Select “Village Schedule” from the options. The following screen will appear

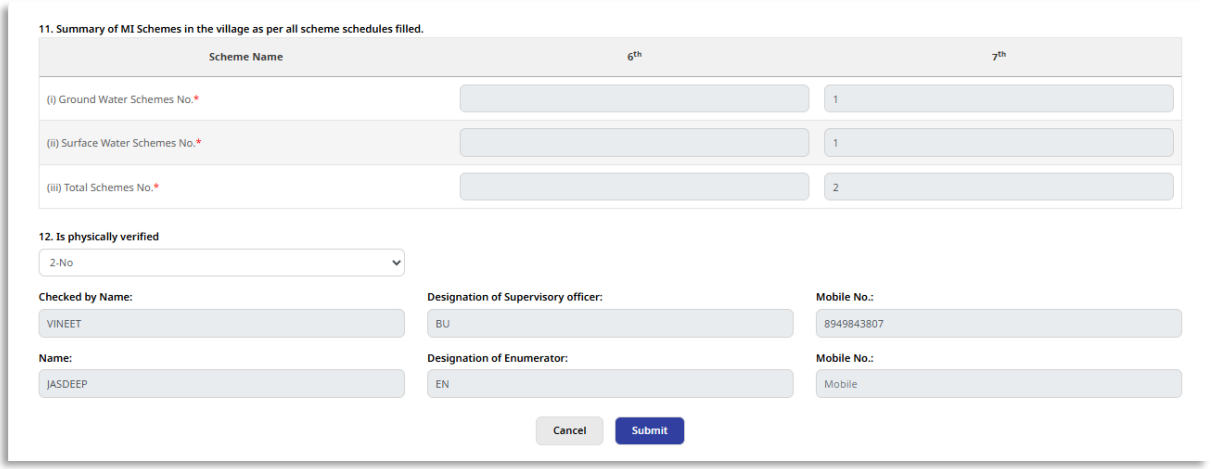


- Select Village
- Click on Filter button



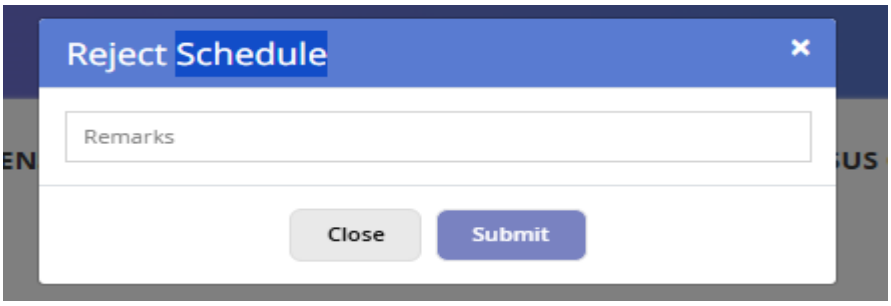
- Click on the edit icon next to the record you wish to update
- The Village schedule form will open in editable mode





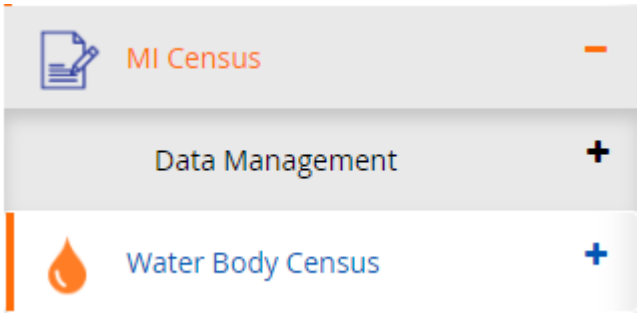
- Update the necessary data
- Click on the Submit button to save the changes

Note:- Block user can also reject the schedule by clicking on the red cross icon under Action column

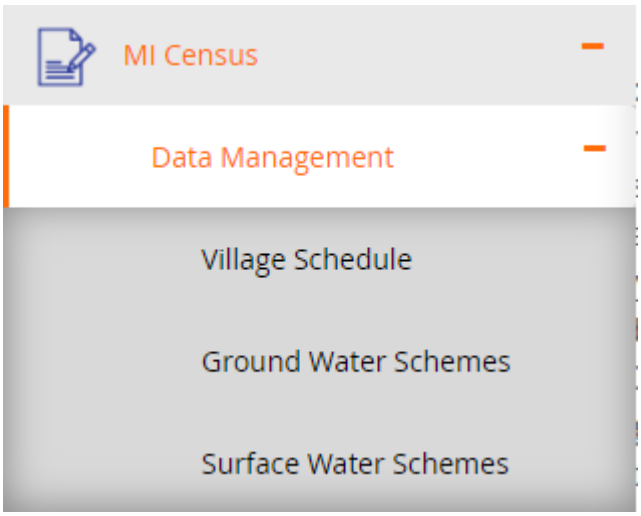


Ground Water Schemes

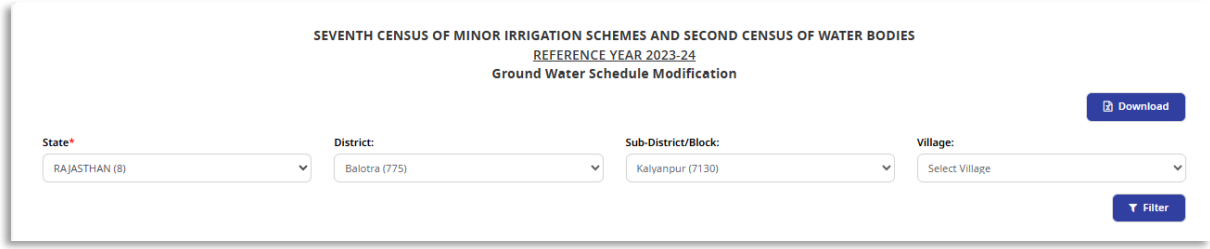
- Click on the plus icon next to the "MI Census" menu. This will display the sub-menu "Data Management"



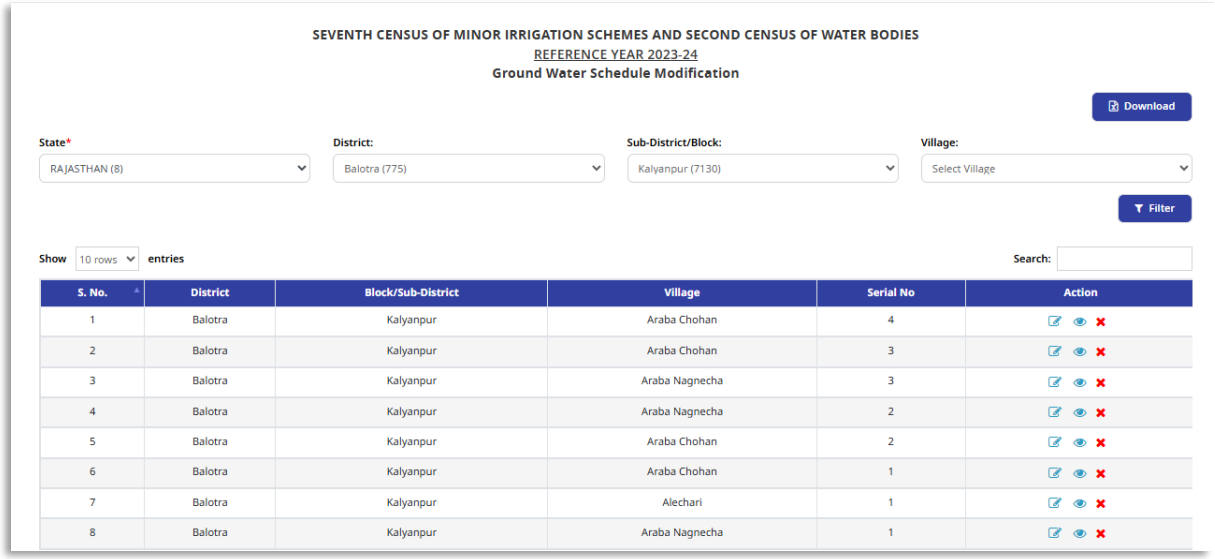
- Click on the plus icon next to "Data Management"



- Select "Ground Water Schemes" from the options. The following screen will appear

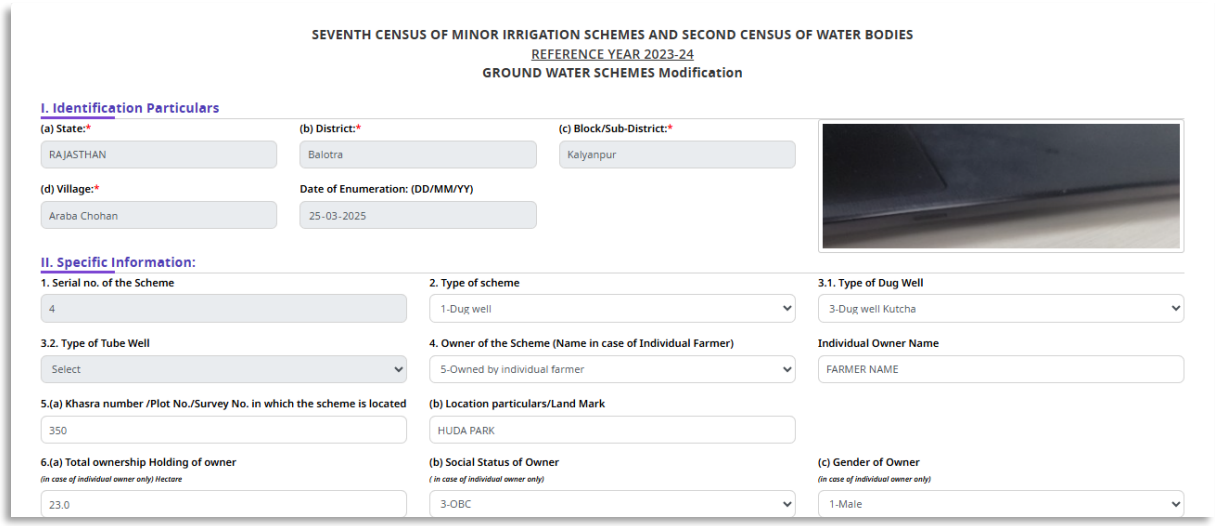


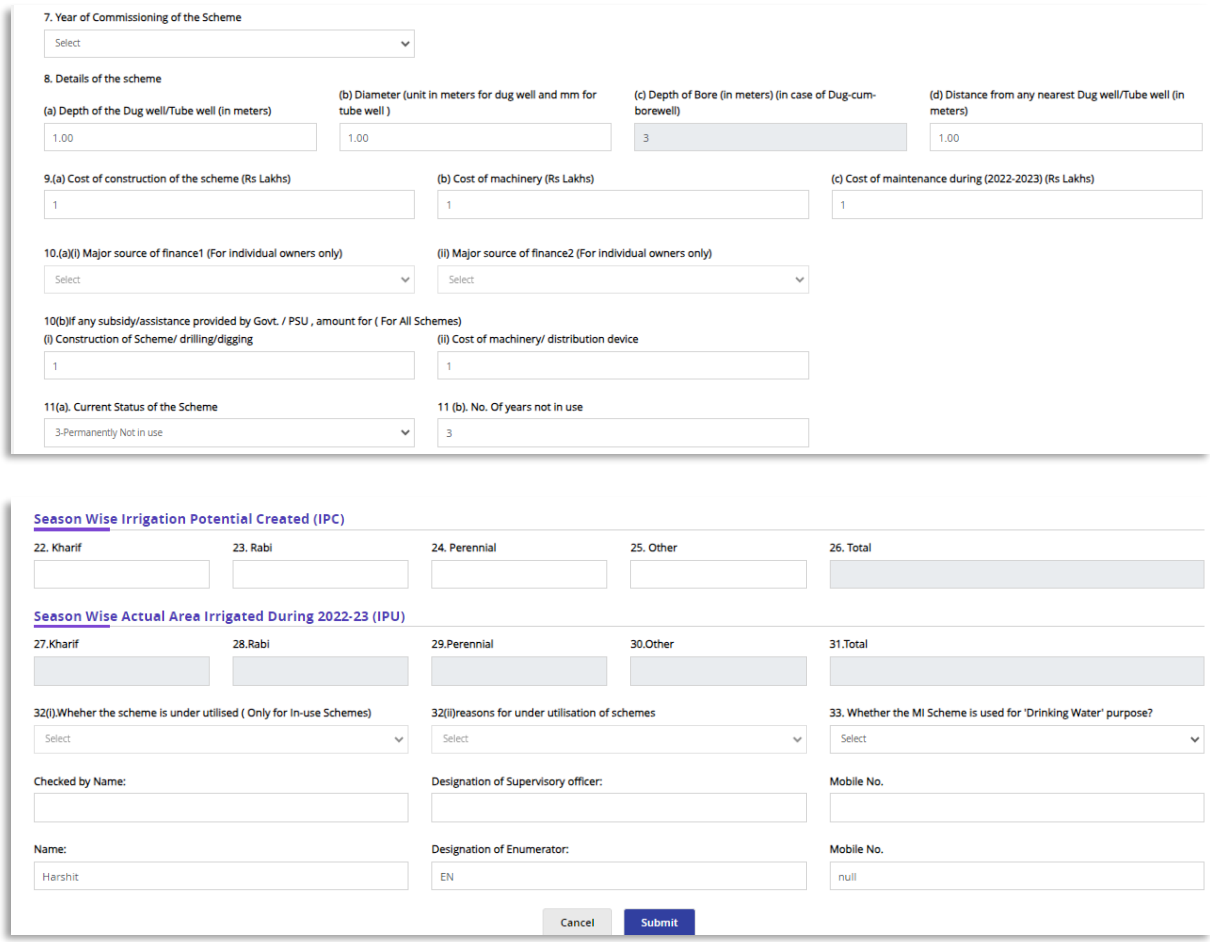
- Click on the Filter button. Records will be displayed according to the selected filters



S. No.	District	Block/Sub-District	Village	Serial No	Action
1	Balotra	Kalyanpur	Araba Chohan	4	
2	Balotra	Kalyanpur	Araba Chohan	3	
3	Balotra	Kalyanpur	Araba Nagnecha	3	
4	Balotra	Kalyanpur	Araba Nagnecha	2	
5	Balotra	Kalyanpur	Araba Chohan	2	
6	Balotra	Kalyanpur	Araba Chohan	1	
7	Balotra	Kalyanpur	Alechari	1	
8	Balotra	Kalyanpur	Araba Nagnecha	1	

- The displayed records are those synchronized from the mobile application, and the user can edit these records.
- Click on the edit icon next to the record you wish to update
- The Ground Water Schemes form will open in editable mode

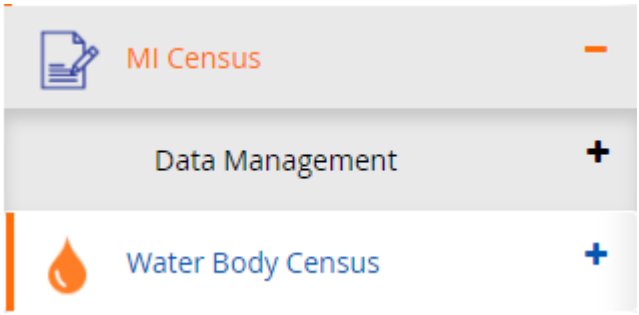




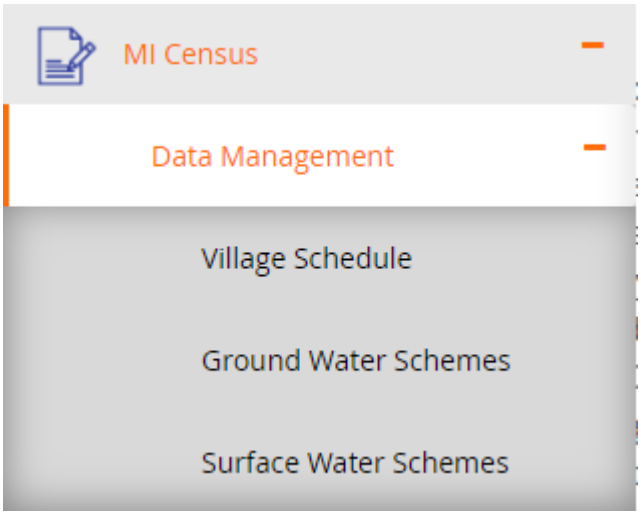
- Update the necessary data
- Click on the Submit button to save the changes

Surface Water Schemes

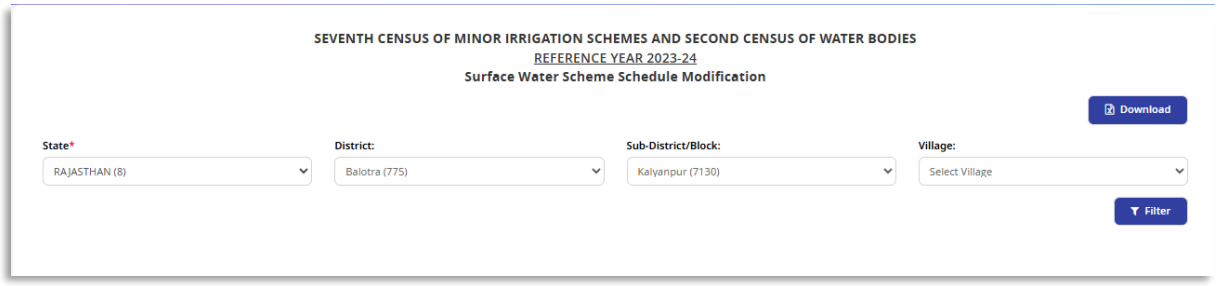
- Click on the plus icon next to the "MI Census" menu. This will display the sub-menu "Data Management"



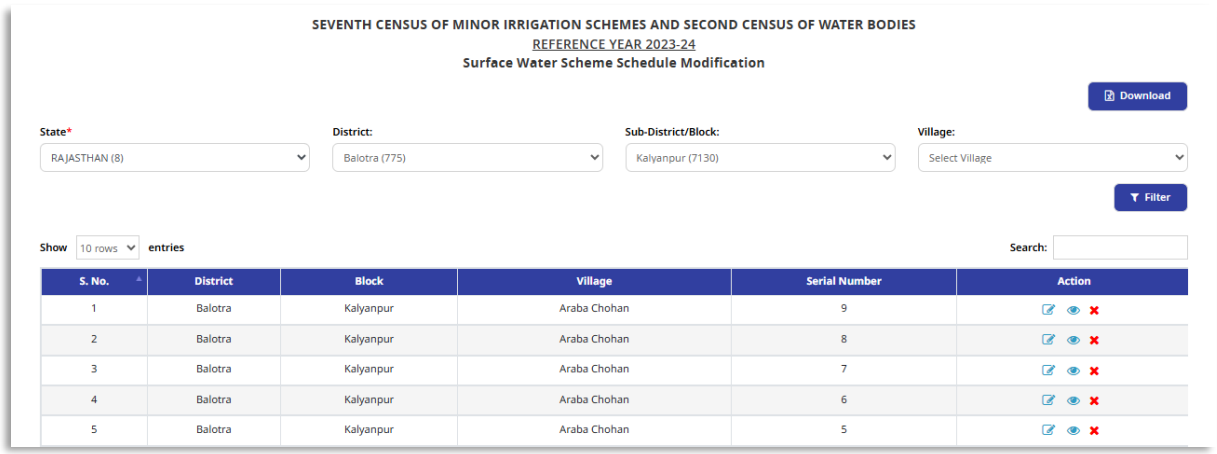
- Click on the plus icon next to “Data Management”



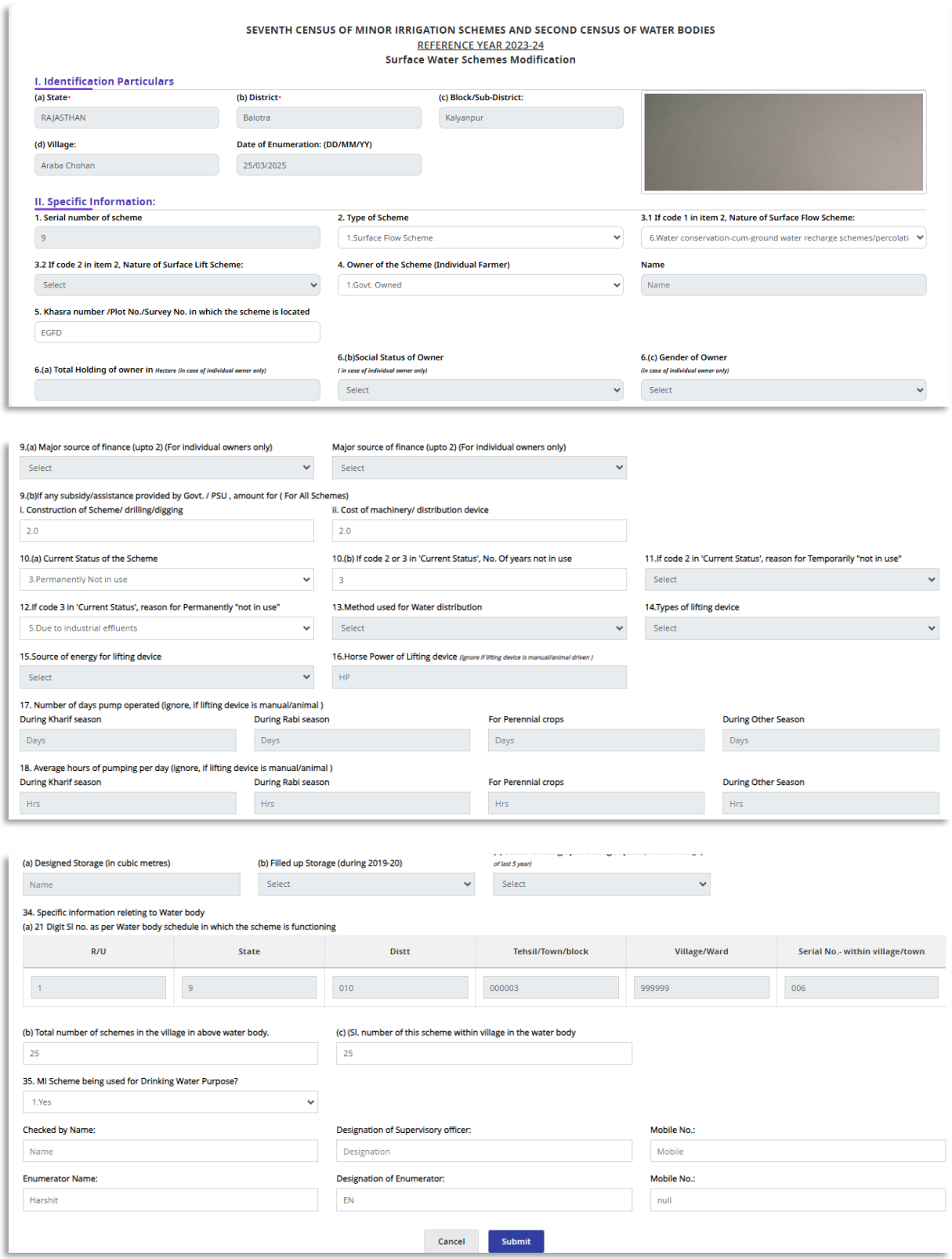
- Select “Surface Water Schemes” from the options. The following screen will appear



- Click on the Filter button. Records will be displayed according to the filters.



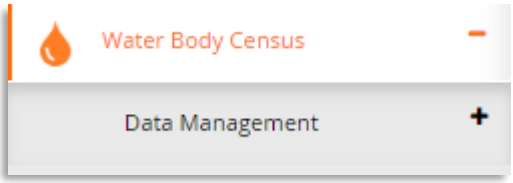
- The displayed records are those synchronized from the mobile application, and the user can edit these records.
- Click on the edit icon next to the record you wish to update
- The Surface Water Schemes form will open in editable mode



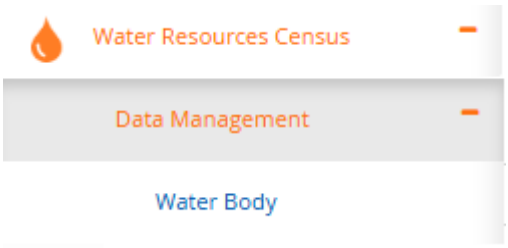
- Update the necessary data
- Click on the Submit button to save the changes

Water Body

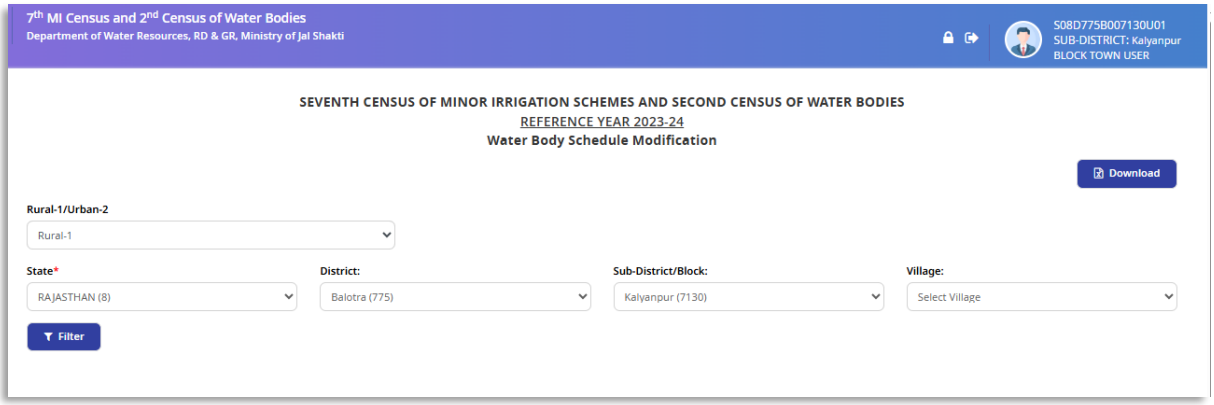
- Click on the plus icon next to the "Water Body Census" menu. This will display the sub-menu "Data Management”



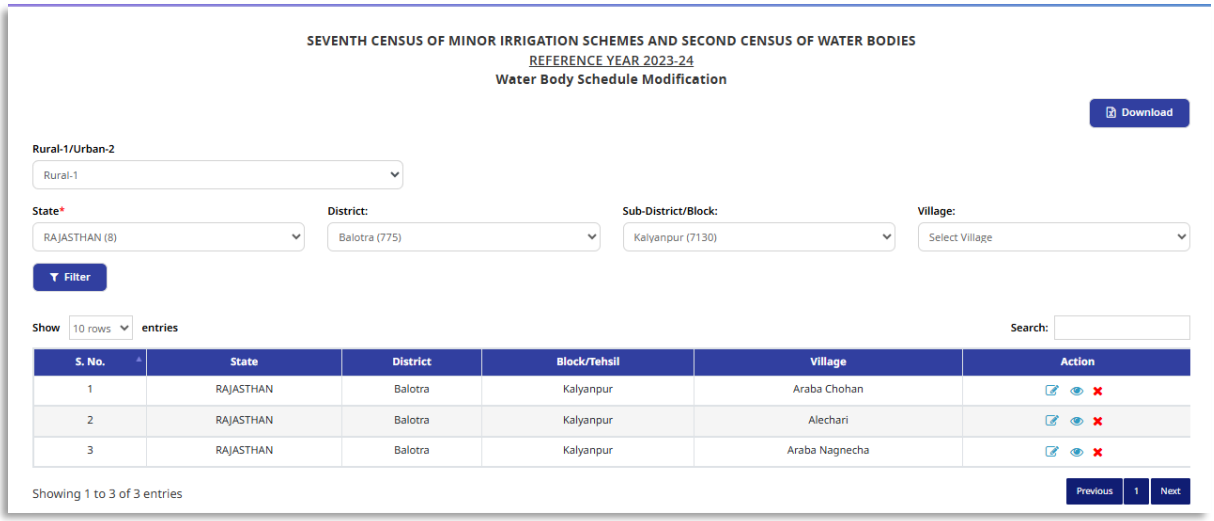
- Click on the plus icon next to “Data Management”



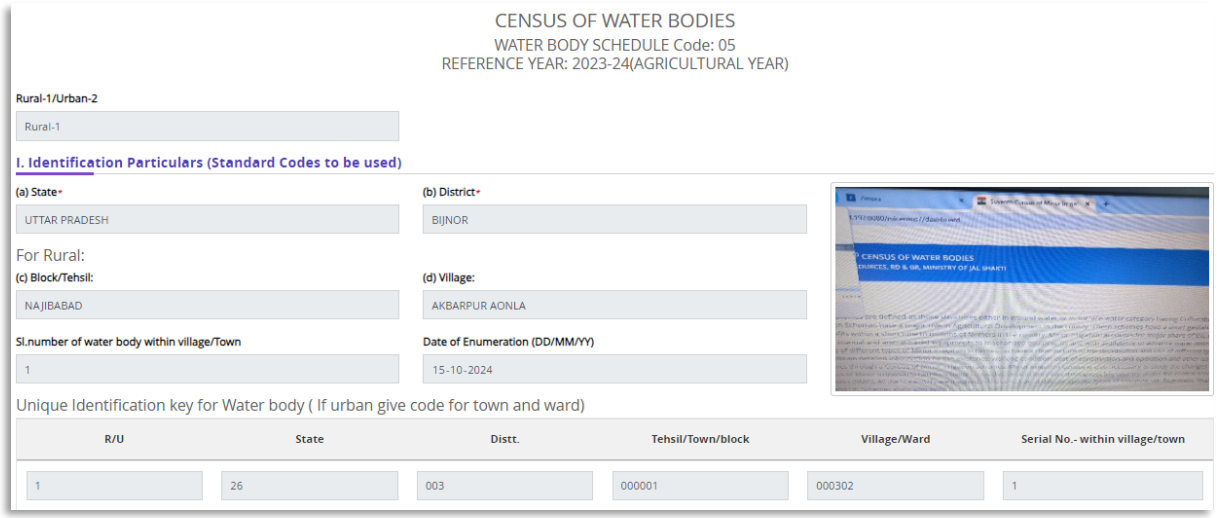
- Select “Water Body” from the options. The following screen will appear

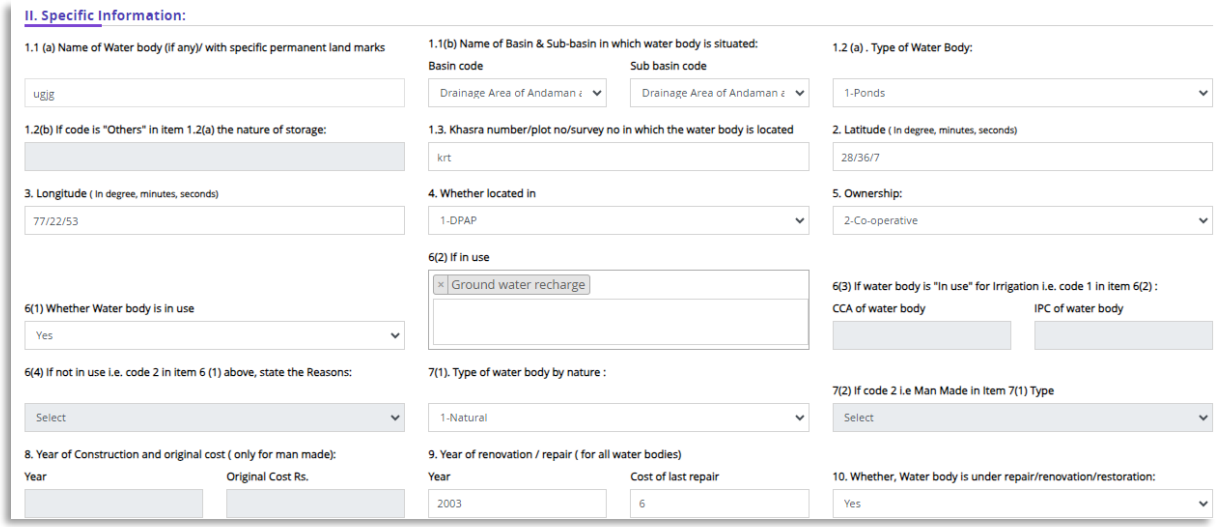


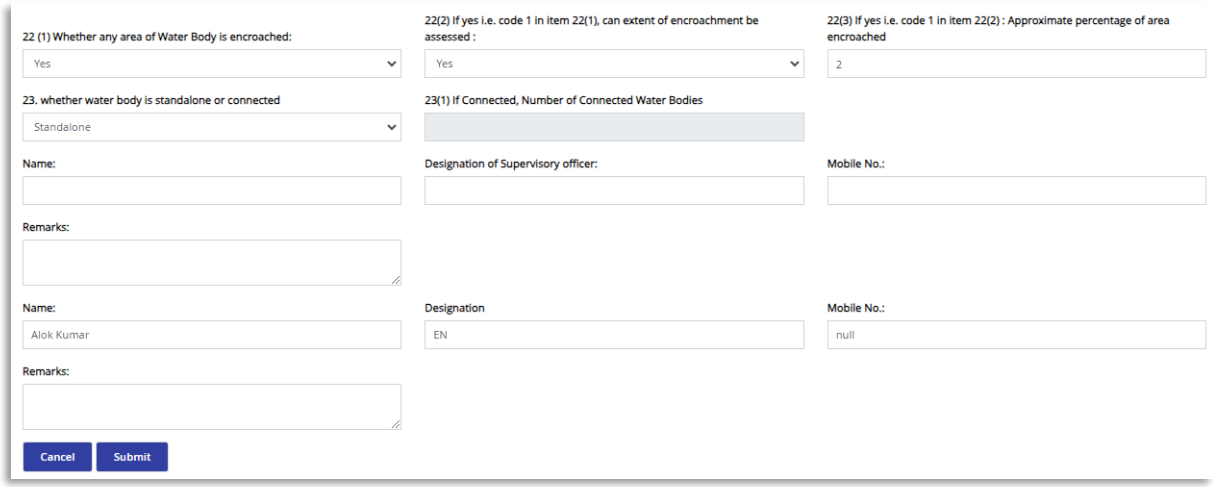
- Click on the Filter button. Records will be displayed according to the filters.



- The displayed records are those synchronized from the mobile application, and the user can edit these records.
- Click on the edit icon next to the record you wish to update
- The Water Body Schedule form will open in editable mode



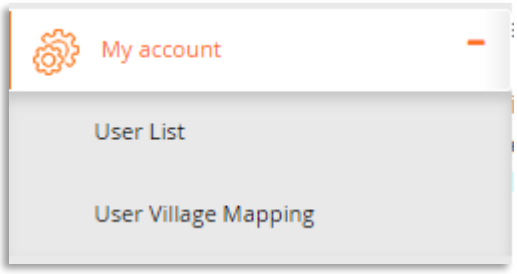




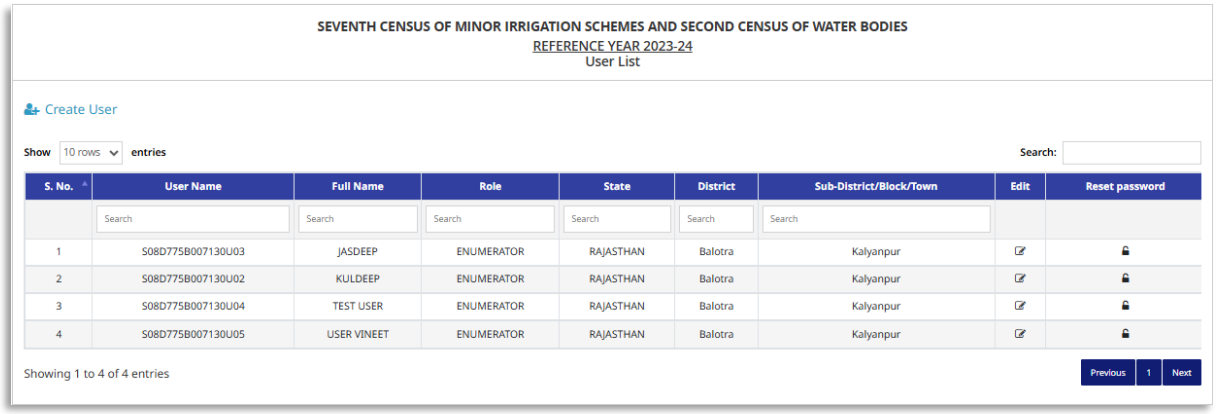
- Update the necessary data
- Click on the Submit button to save the changes

My Account - User List

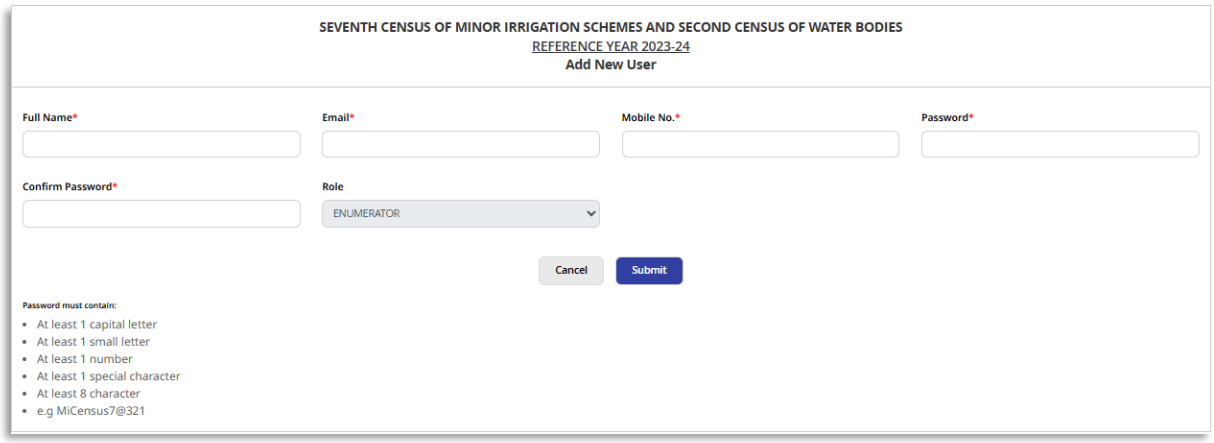
- Click on the plus icon next to the "My Account" menu. This will display the sub-menus "User List" and “User Village Mapping”



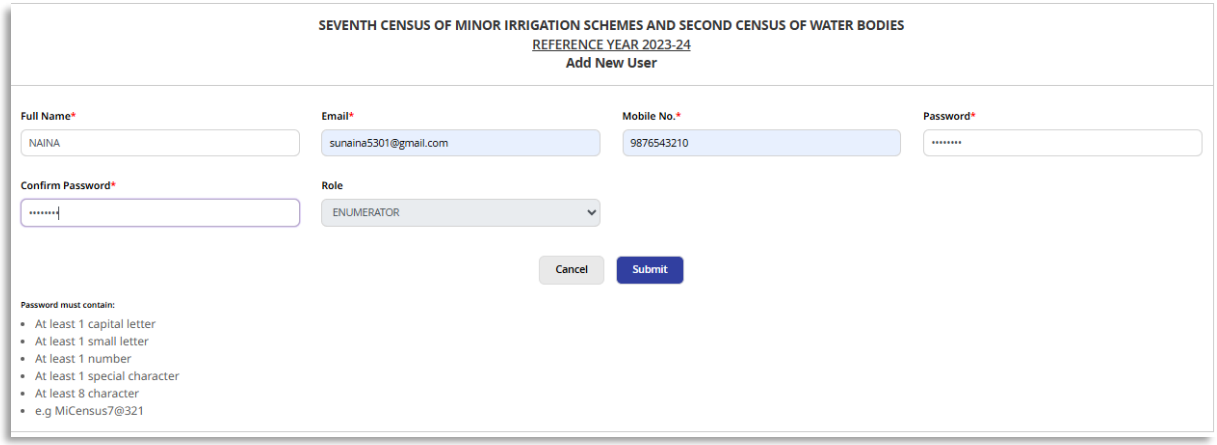
- Select “User List”. The following screen will appear



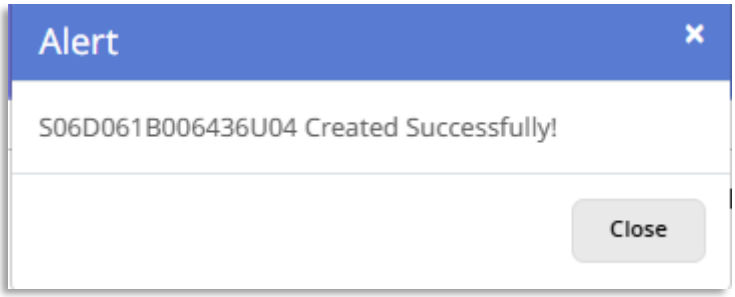
- The Block User has access to view the list of all users (Enumerator users) but only for the specific block to which the logged-in user belongs.
  - The Block User can create Enumerator Users
- To add a new user, click on the “Create User” link



➢ Fill out the mandatory fields



➢ Click on the Submit button. A success message will be displayed

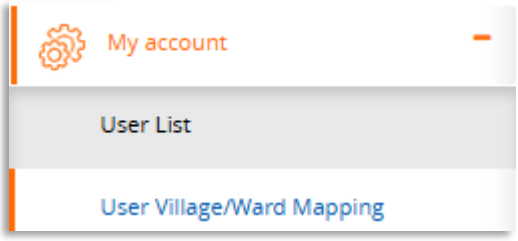


- The user is successfully created with the user ID: S06D061B006436U04.

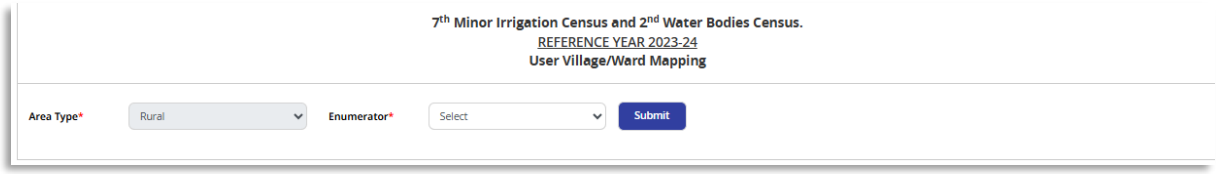
This user is a Enumerator **user** and can only login through Mobile application.

User Village/Ward Mapping

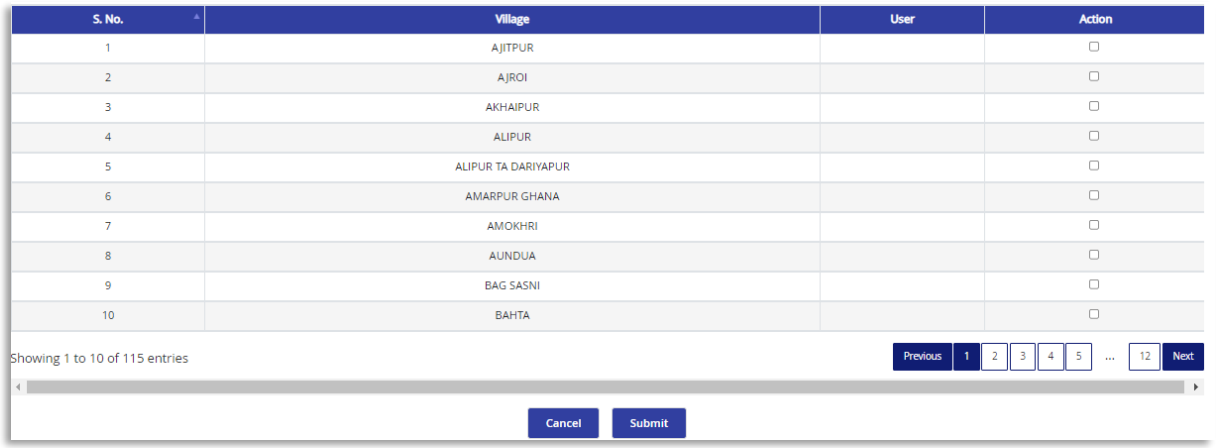
➢ Click on the plus icon next to the "My Account" menu. This will display the sub-menu "User List" and "User Village Mapping"



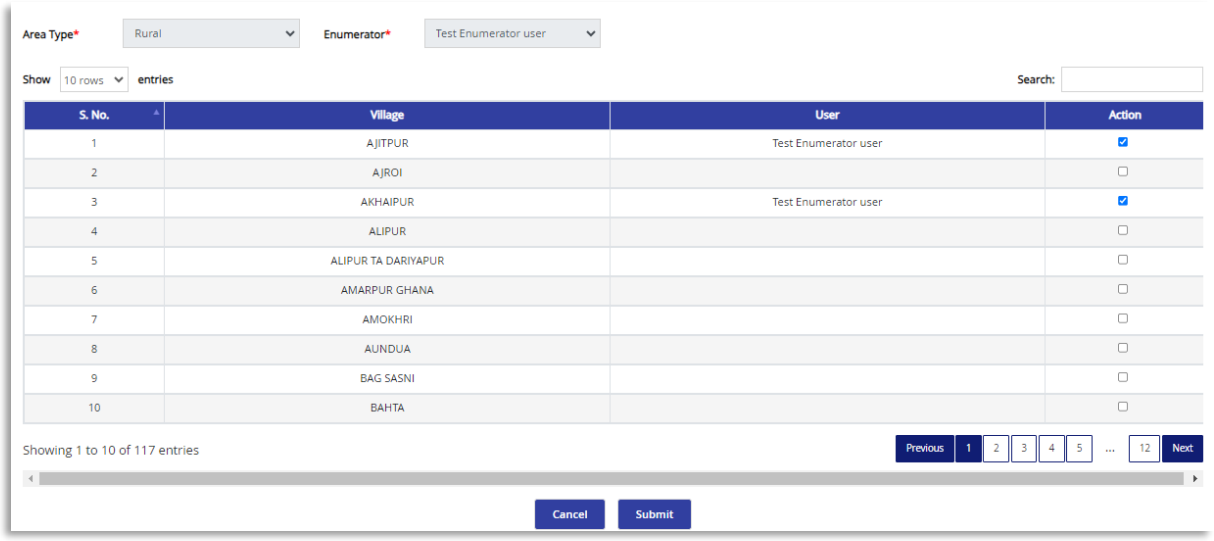
- Select "User Village/Ward Mapping". The following screen will appear



- Select Enumerator
- Click the Submit button, and a list of Villages will be shown



- Check the boxes next to the Villages you wish to map to the selected Enumerator.
- After selecting the Villages, click the **Submit** button to complete the mapping process.
- To edit the existing Mapping, select the Enumerator again
- Click the Submit button to display the current village mapping.



- To modify the mapping, you can either:

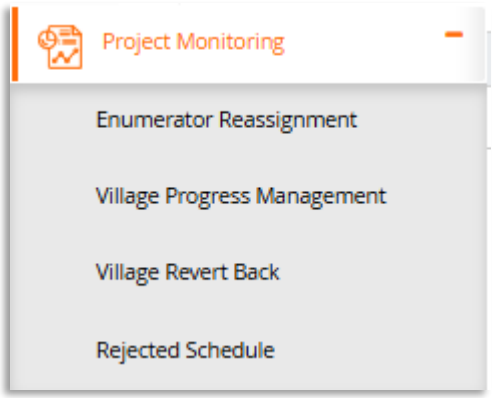
  - **Uncheck** the boxes for villages you wish to un map.
  - **Check** new boxes for villages you want to add to the mapping.

- After making your changes, click the **Submit** button to update the mapping.

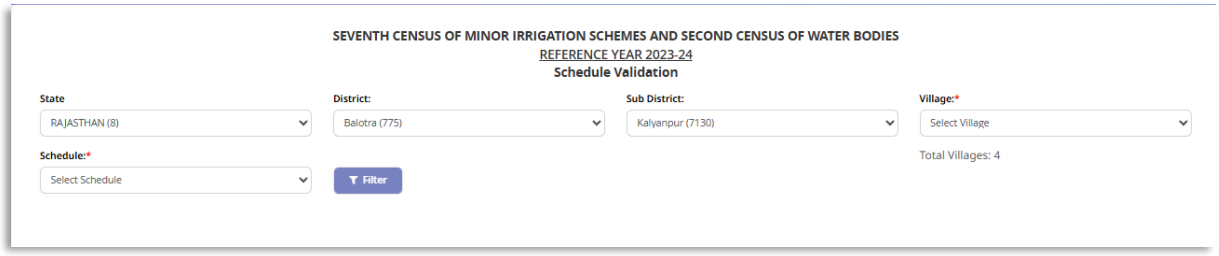
- When the Enumerator logs in through the mobile app, only the **mapped villages** will be displayed for **Village**, **Ground Water Schemes**, **Surface Water**, and **Water Bodies**.

Project Monitoring- Schedule Validation

- Click on the plus icon next to the "Project Monitoring" menu. This will display the sub-menus "Schedule Validation" and "Status Management"



- Select "Enumerator Reassignment". The following screen will appear



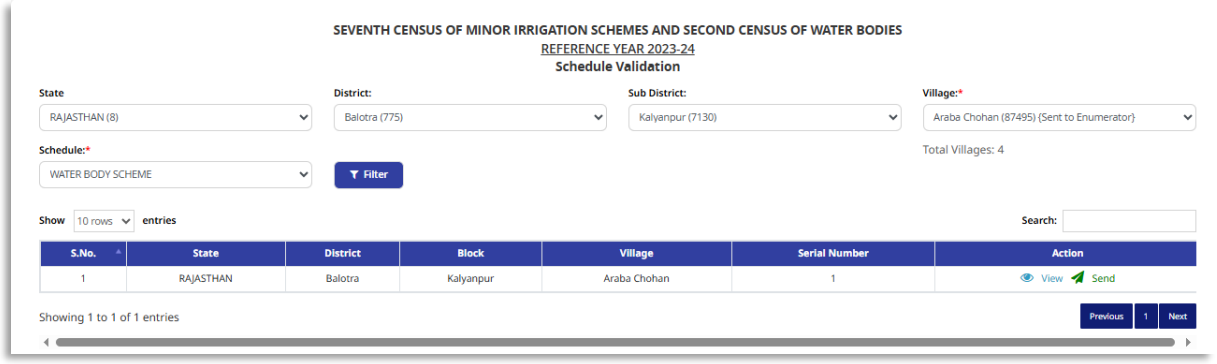
This module allows Block users to review and address any missed validations in Village, Ground, Surface Water, and Water Body schedules submitted by Enumerator. If any validation errors are detected, Block users can send the corresponding village back to the Enumerator for correction

Steps to Use the Schedule Validation Module

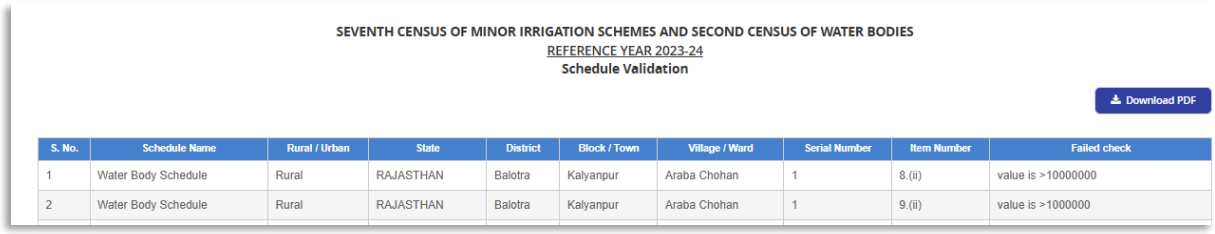
- The State, District, and Block/Tehsil fields will be disabled, displaying the relevant information based on the user's login credentials.
- The **village list** will appear in the dropdown menu.
- Each village name will include its current **status**:

- **Complete**: Indicates that the village schedule has been submitted by the Enumerator via the mobile application.
- **Sent to Enumerator**: Indicates that the schedule was returned to the Enumerator for corrections due to missed validations.
- **Finalized**: Indicates that the Enumerator has made the necessary corrections and resubmitted the schedule through the web login.

- Select the **village** from the dropdown menu.
- Select the **schedule** from the dropdown menu
- Click on Filter



- Click on **"View"** to display the missing validations in the selected schedule.



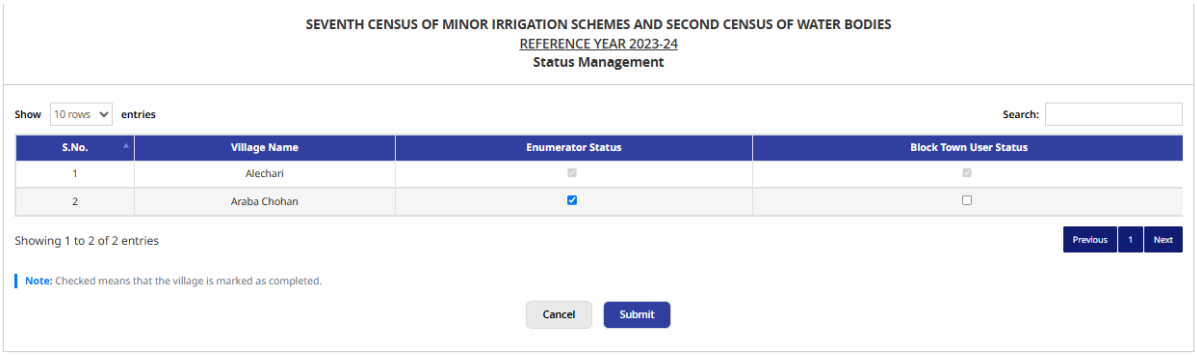
- If validations are missing, click on **"Send"** to return the schedule to the Enumerator for corrections.

Note:- Enumerator can make corrections and resubmit schedules using their web login.

Project Monitoring- Village Progress Management

The **Village Progress Management** module allows Block users to finalize villages whose statuses are marked as **Complete** or **Finalized** in the Schedule Validation module. Once finalized by the Block user, these villages will no longer appear in the Schedule Validation module.

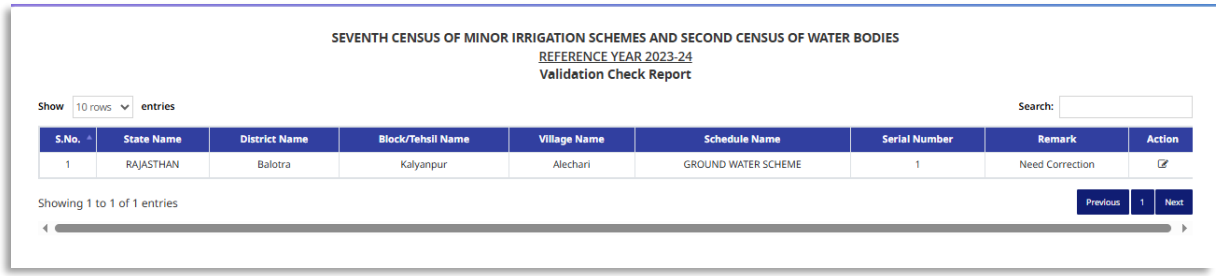
- Select **"Village Progress Management"** from the sub-menu under Project Monitoring.
- The corresponding screen will display a list of villages with statuses marked as **Complete** or **Finalized** in the Schedule Validation module.



- A checkbox is provided against each village in the list.
- Check the box next to the ones you want to finalize.
- After selecting the desired villages, click the **"Submit"** button.
- This action confirms that the selected villages are finalized from the Block user's end.
- Once submitted, the finalized villages will no longer appear in the **Schedule Validation** module.

Project Monitoring- Village Revert Back

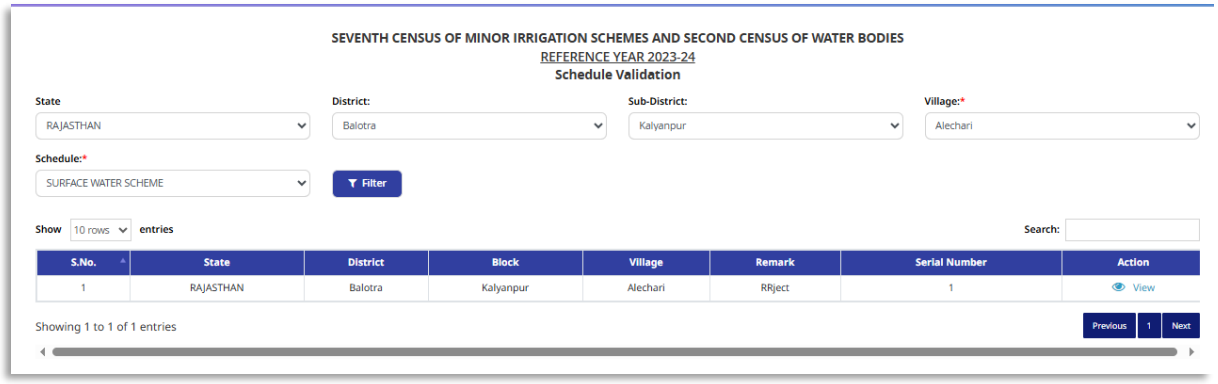
The **Village Revert Back** module allows Block users to edit data that has been reverted by the State and District authorities. State and District users will enter remark and submit the data for correction. Once reverted, the schedule data will be displayed in this module for the Block users to review and update accordingly.



- Click on edit icon to update the record.

Project Monitoring- Rejected Schedule

The **Rejected Schedule** module allows Block users to view data that has been rejected by the Block user

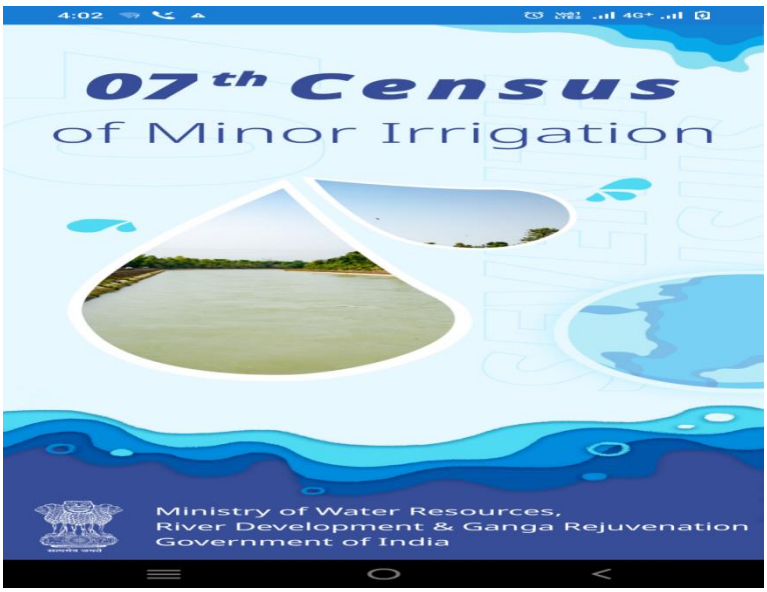


5.2 Instructions for Mobile Application

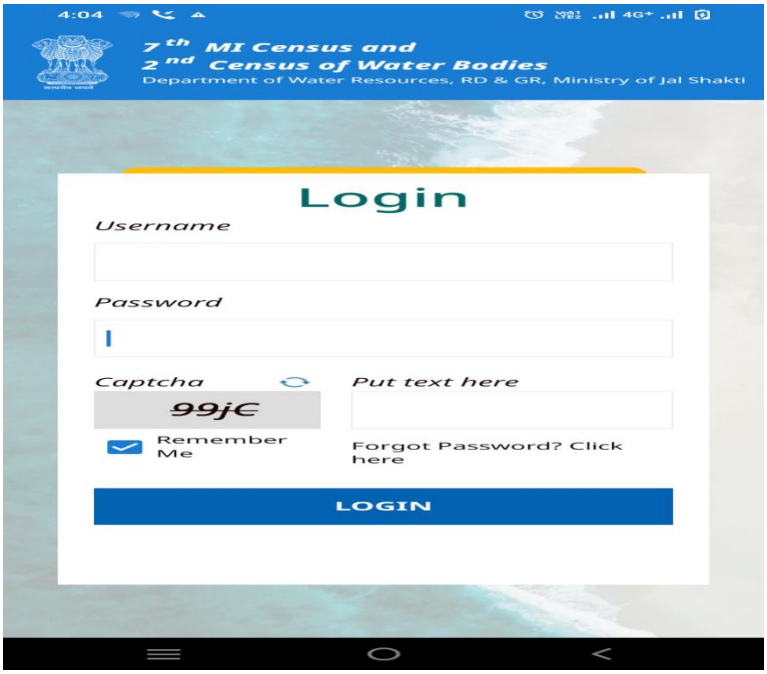
5.2.1 Introduction

This user manual provides a step-by-step guide for using the **MI Census & Water Body Application**. The application enables users to collect and manage census data related to **Water bodies, Villages, Groundwater, Surface Water** schemes across different regions. It is designed to support offline / online data entry, ensuring that information can be captured even in remote areas with or without an internet connection. Once online, the data is synchronized with the central server.

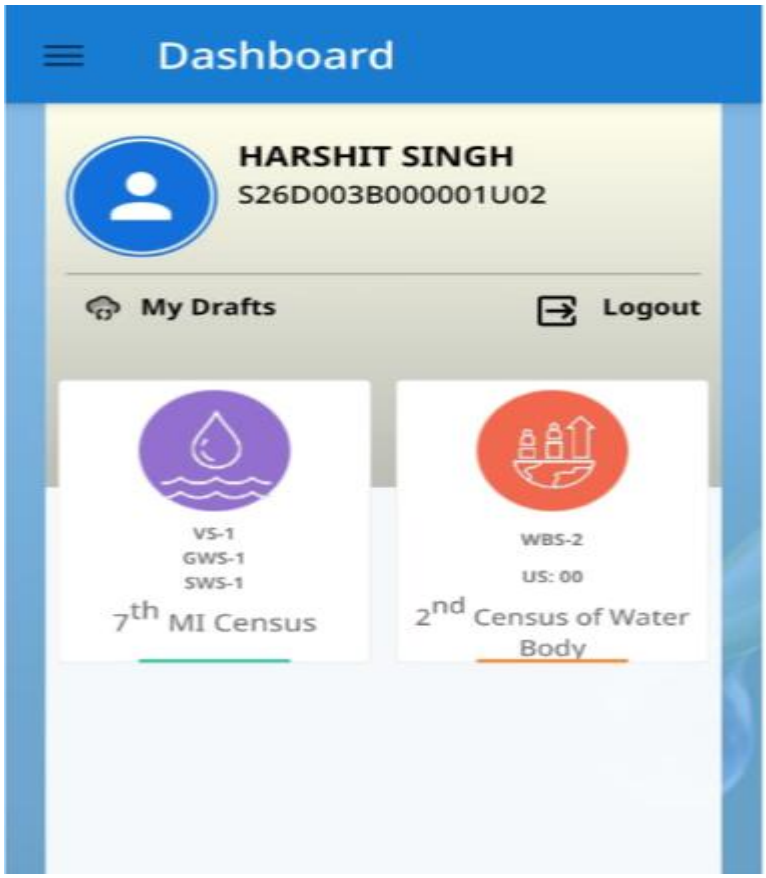
- Open the application



- After application SPLASH->LOGIN screen appear



1. Enter login credentials
2. Upon successful login, the application dashboard will be displayed.



3. The dashboard contains the following key sections:

- **7th MI Census Docket**: Displays the count of all offline data entries for:

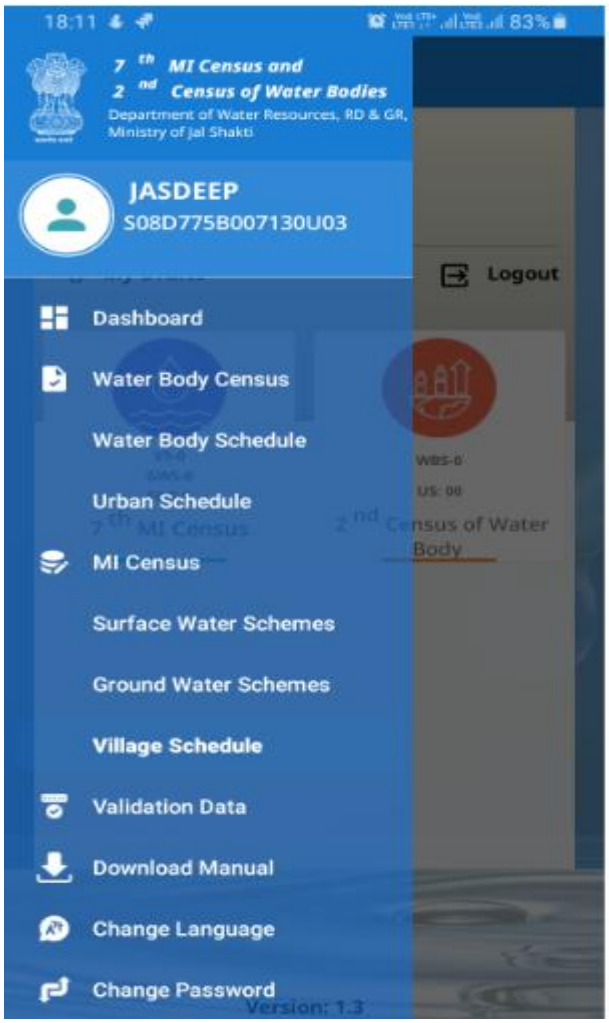
1. VS (Village Schedule)
2. GWS (Ground Water Schedule)
3. SWS (Surface Water Schedule)

- **2nd** Census of Water Bodies: Displays the count of all offline data entries for:

    1. WBS (Water Body Schedule)
    2. US (Urban Schedule)

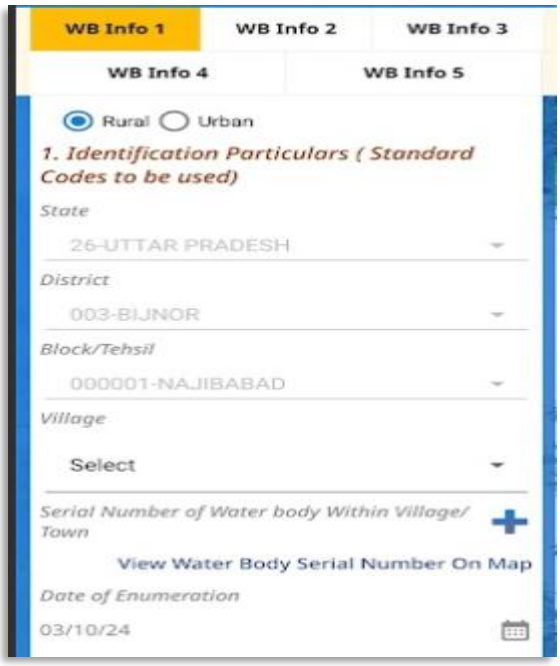
- **My Drafts:** The offline data is saved locally, allowing users to resume editing later without losing their work. Once the data is submitted, a sync icon will be displayed, indicating that the system will synchronize the data with the MI Census server when an internet connection is available.

- **Logout:** This option allows you to exit the application. However, if there is unsynced offline data, the system will prompt you to sync the data before logging out.
- **Navigation Menu:** The three horizontal black lines in the top-left corner represent the application's navigation menu.

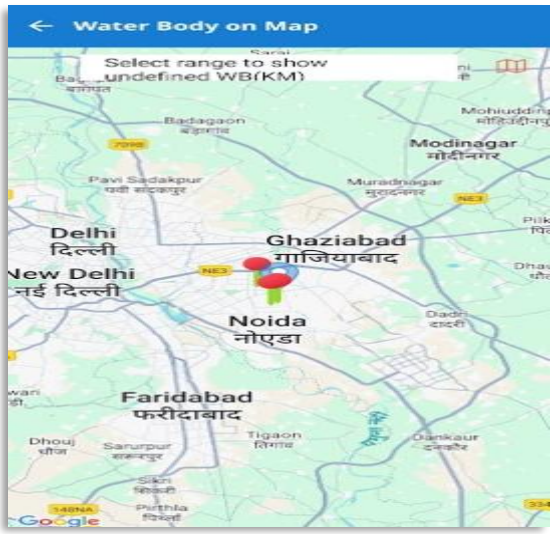


5.2.2 Water Body Schedules

- Click on the Navigation Icon
- Select Water Body Schedule
- For rural areas, **State**, **District**, and **Block** fields will be prefilled and disabled. For urban areas, the **State, District,** and **Town** fields will be prefilled and disabled.

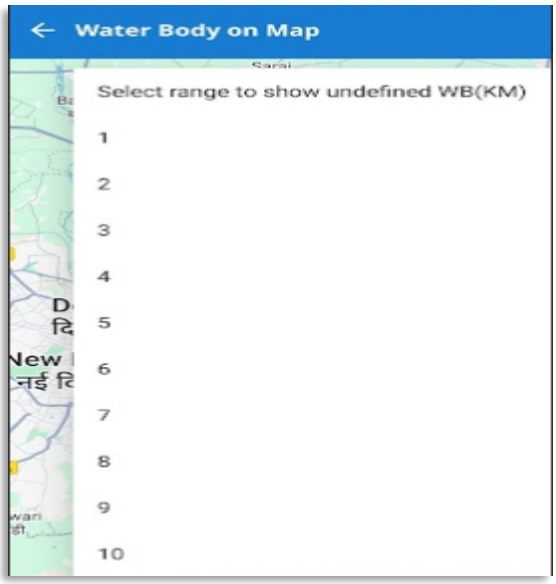


- Select the **Village** (for Rural areas) or **Ward** (For Urban areas). The location (Latitude, Longitude) will be updated automatically.
- Click on View Water Body Serial Number on Map to capture the Serial No of water body
- The map will appear, showing your current location.

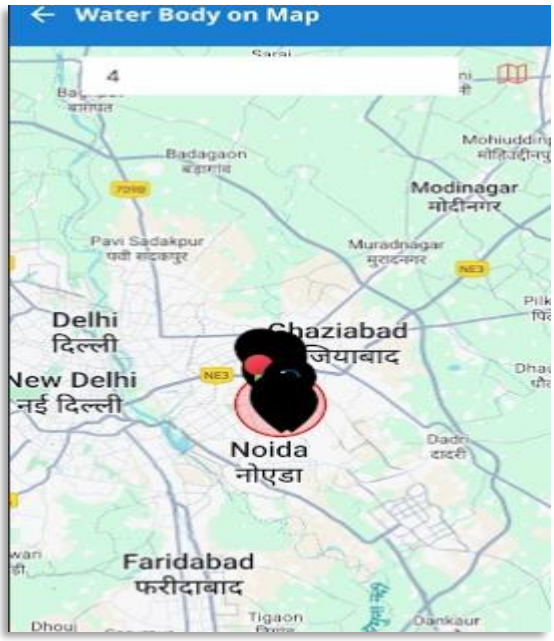


Viewing Water Bodies with undefined villages:

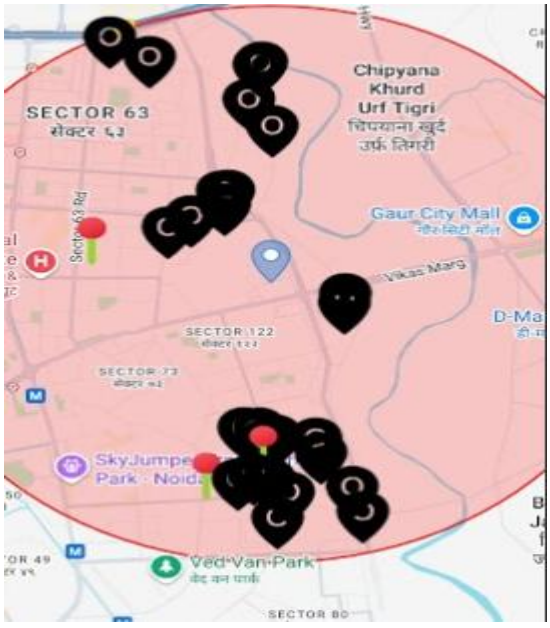
- Click on “Select range to show undefined WB (KM)” link



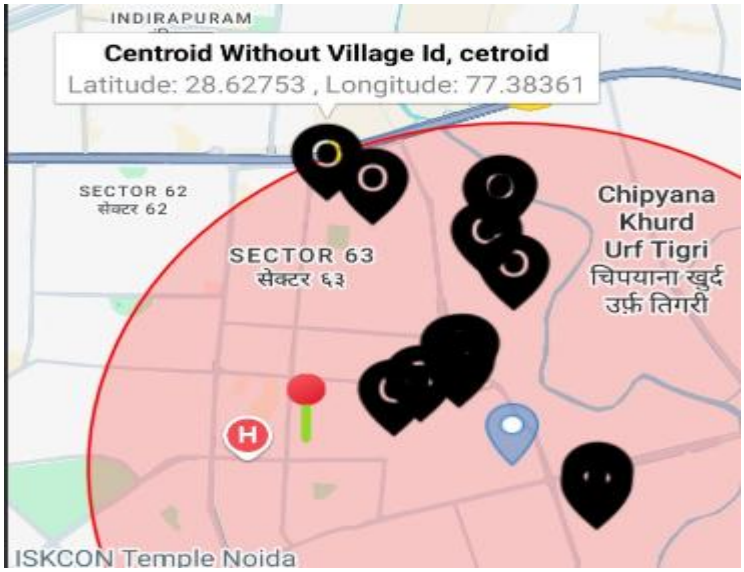
- Select any range



- Zoom in the screen to view the water bodies



- Select the water body to view the details



Capturing the Serial No :-

- Zoom out on the map until you reach the desired location.

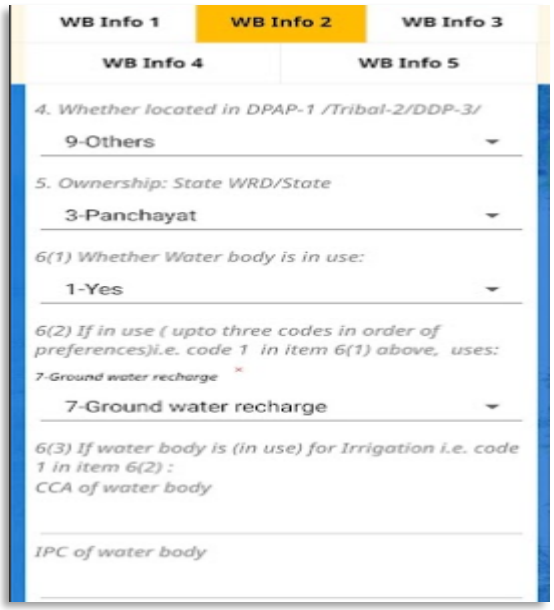
- Zoom-In to view all the water bodies/polygon area/centroid/point of the selected village/Ward

- Tap on the point to view water body details.

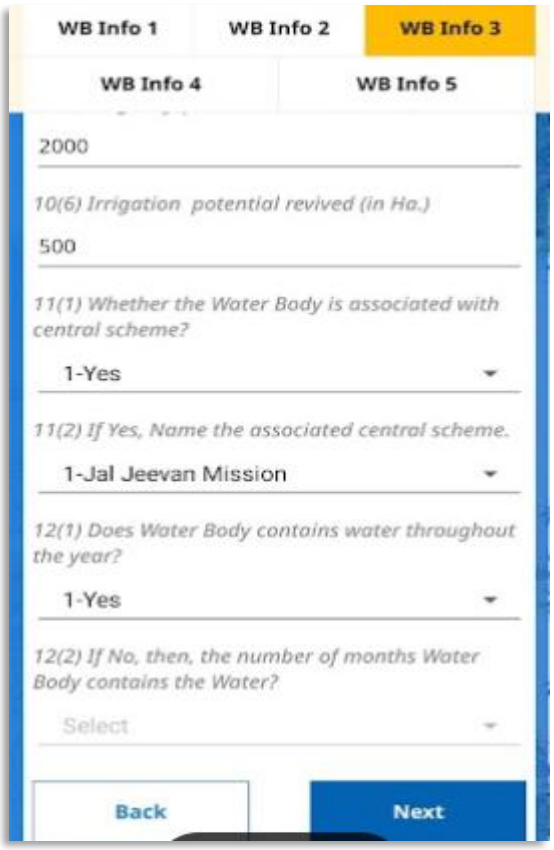
- If status is pending, click on "**Fill Water Body**" button. Then Tap on "**Enter Remarks**" to update the current status *(i.e Exist/ Not Exists)* of the water body.
- After clicking on **"Fill Water Body"** button, you will be redirected to the **Water Body Schedule** screen, where the serial number will be automatically fetched from the map (As per first water body census).

NOTE::-To Add New Water Body Schedule -> Click On +(Plus) icon to proceed

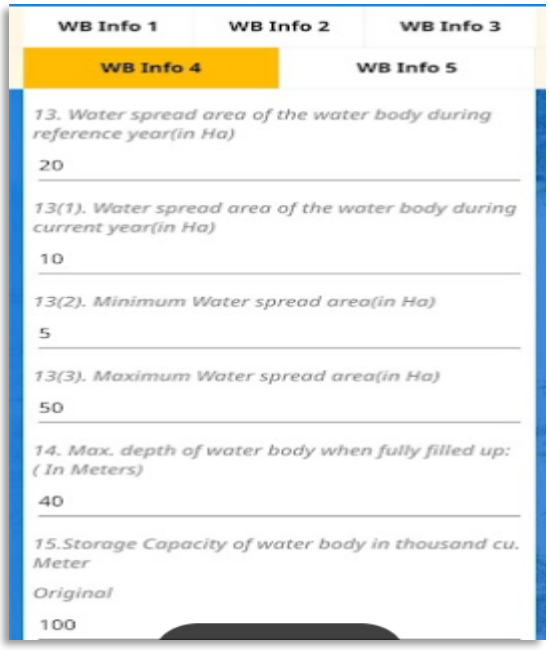
- Fill the required fields
- Click Next to proceed to the WB Info 2 tab and fill in the required fields.

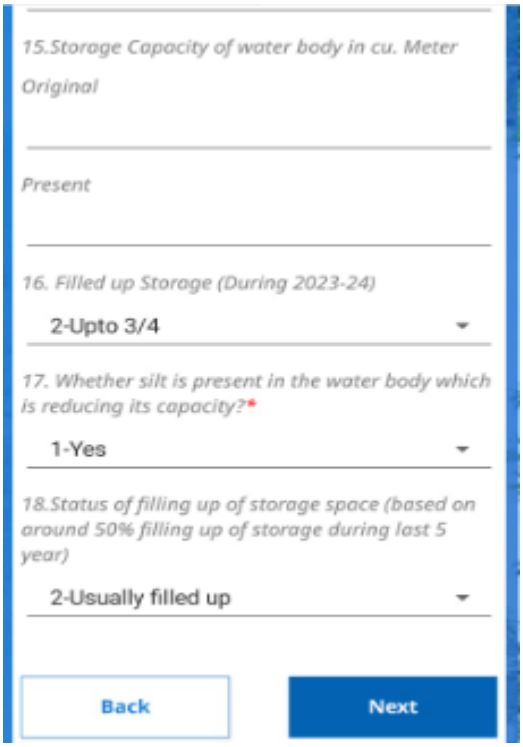


- Click Next to proceed to the WB Info 3 tab and fill in the required fields

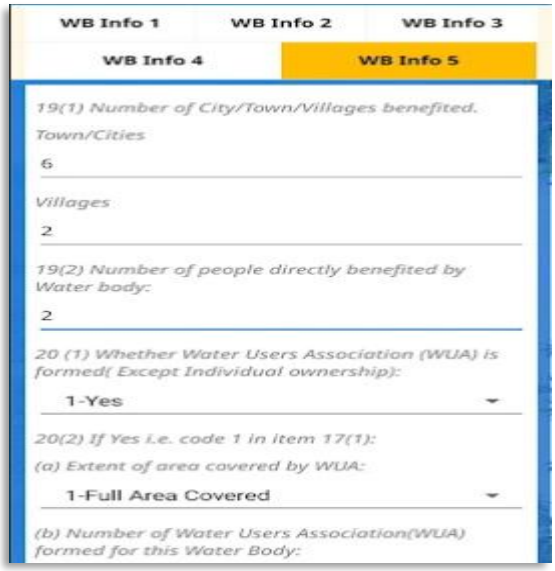


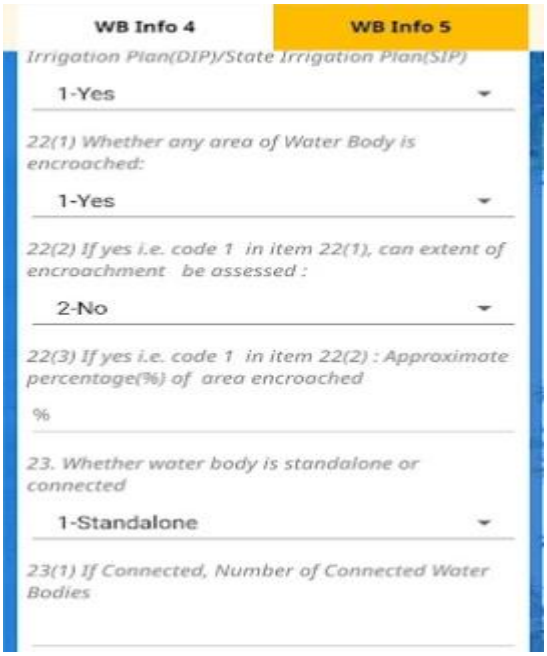
- Click Next to proceed to the WB Info 4 tab and fill in the required fields

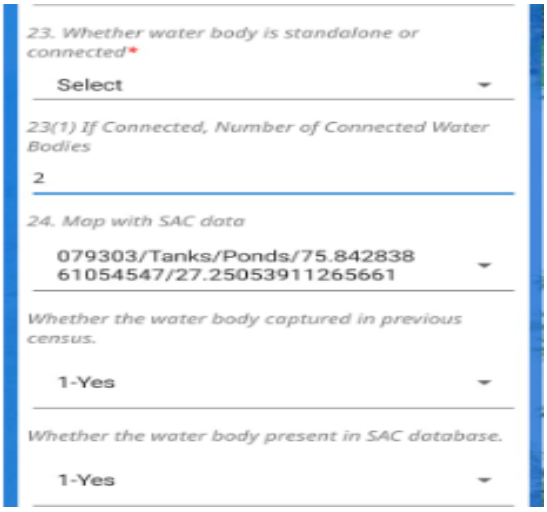




- Click Next to proceed to the WB Info 5 tab and fill in the required fields

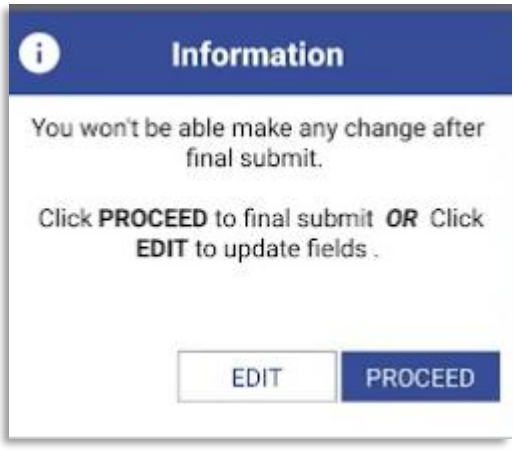



WB Info 4
WB Info 5
Irrigation Plan(DIP)/State Irrigation Plan(SIP)
1-Yes
22(1) Whether any area of Water Body is encroached:
1-Yes
22(2) If yes i.e. code 1 in item 22(1), can extent of encroachment be assessed :
2-No
22(3) If yes i.e. code 1 in item 22(2) : Approximate percentage(%) of area encroached
%
23. Whether water body is standalone or connected
1-Standalone
23(1) If Connected, Number of Connected Water Bodies


23. Whether water body is standalone or connected*
Select
23(1) If Connected, Number of Connected Water Bodies
2
24. Map with SAC data
079303/Tanks/Ponds/75.842838 61054547/27.25053911265661
Whether the water body captured in previous census.
1-Yes
Whether the water body present in SAC database.
1-Yes

Note: - In photograph, latitude and longitude will also get captured.

- After filling in all details, click Submit to trigger an information pop-up

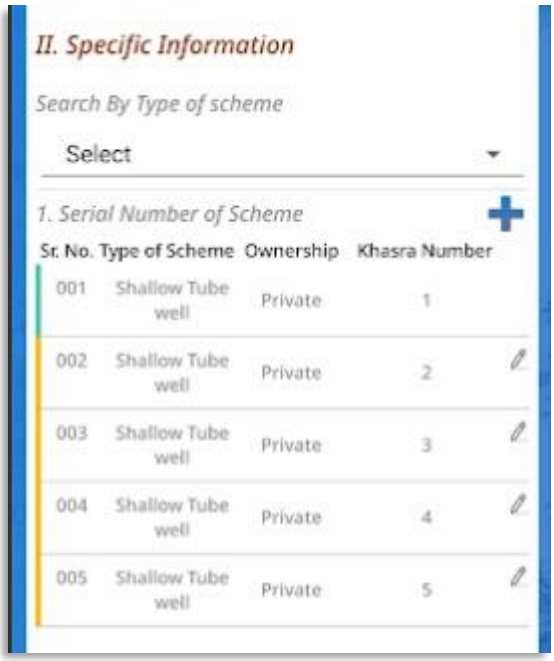


- Click 'Edit' to update the form, or click 'Proceed' to submit the data."
- Upon clicking the Proceed button, a success message will be displayed

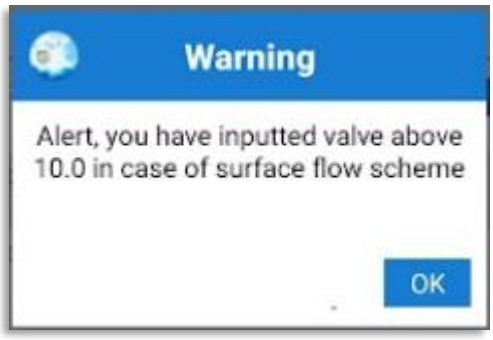
5.2.3 Surface Water Schemes

- Click on the Navigation Icon
- Select Surface water schemes and Basic Details tab will open

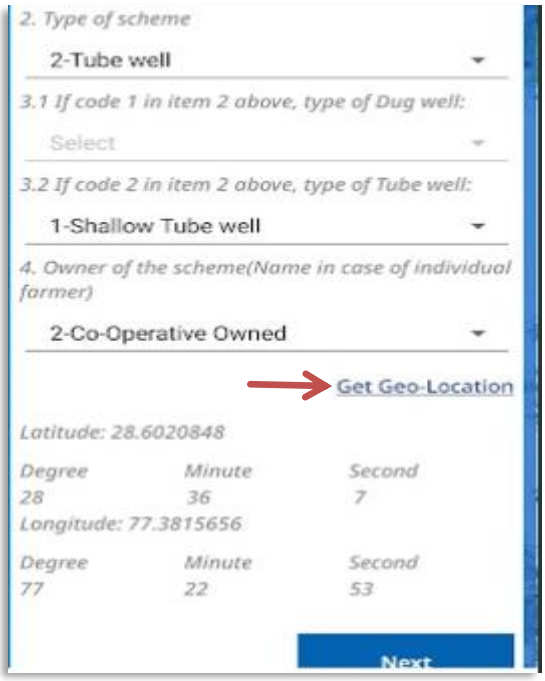
- The fields for State, District, and Block are pre-filled and disabled.
- Select the Village, and the Serial Number of the Scheme will be auto-filled based on the selected village.



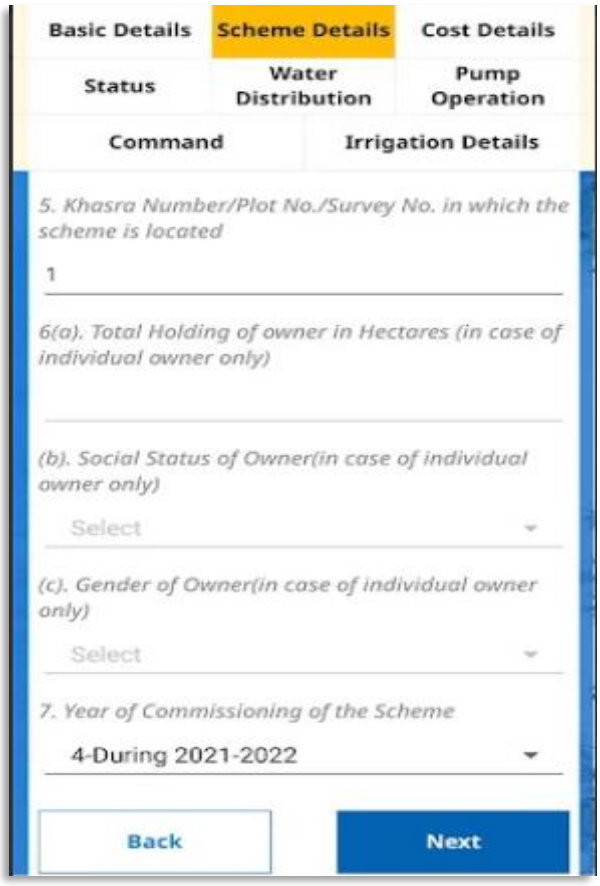
- Tap on any Serial Number with an edit icon to display a warning message.



- The following fields will be auto-populated form the first census
  - Type of Scheme
  - Owner of the Scheme
  - Geo Location (Latitude, Longitude)

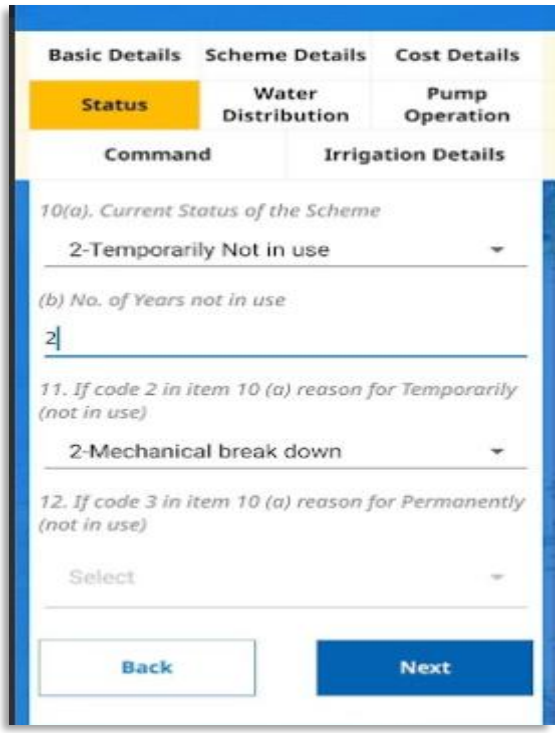


- If the Geo Location is not available, click on Get Geo Location
- Click Next to proceed to the Scheme Details tab and fill in the required fields.
- Here following fields will be auto-populated from the first census: -
  - 5(a)- Khasra Number/Plot No/Survey No in which the scheme is located

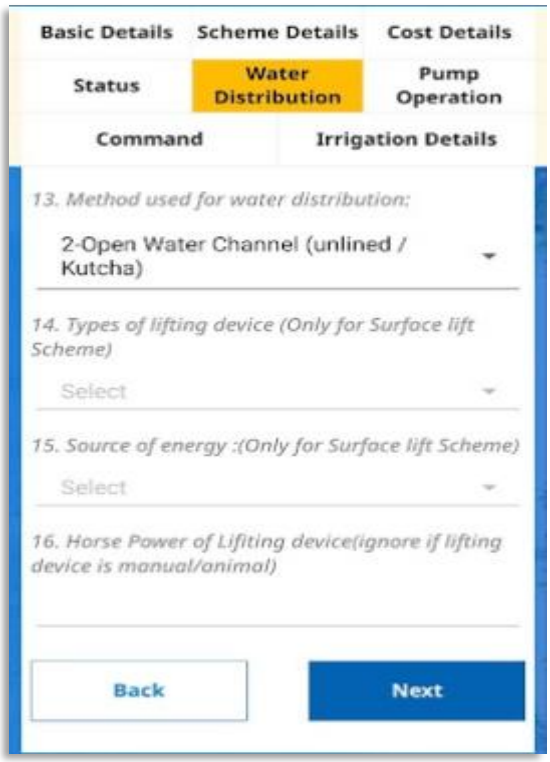


- Click Next to proceed to the Cost Details tab and fill in the required fields.
- Here following fields will be auto-populated from the first census: -
    - 8(a)- Cost of construction of the scheme

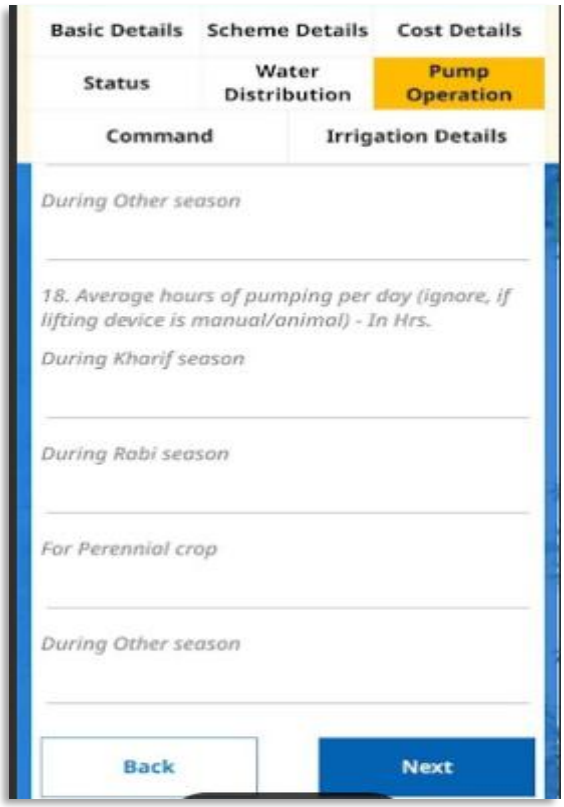
- Click Next to proceed to the Status tab and fill in the required fields.



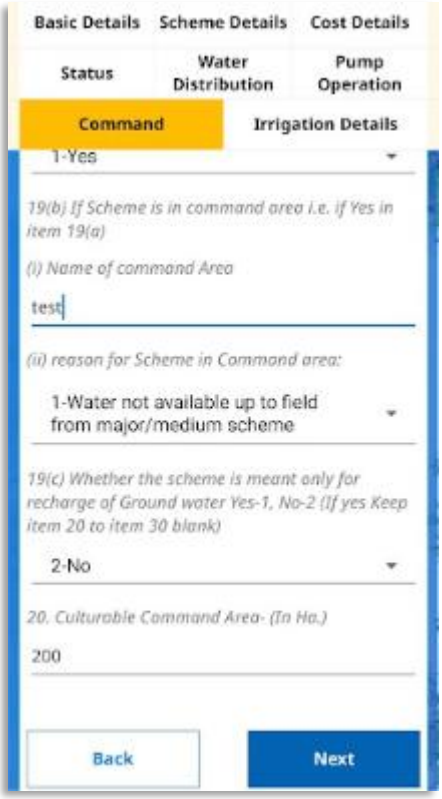
- Click Next to proceed to the Water Distribution tab and fill in the required fields.



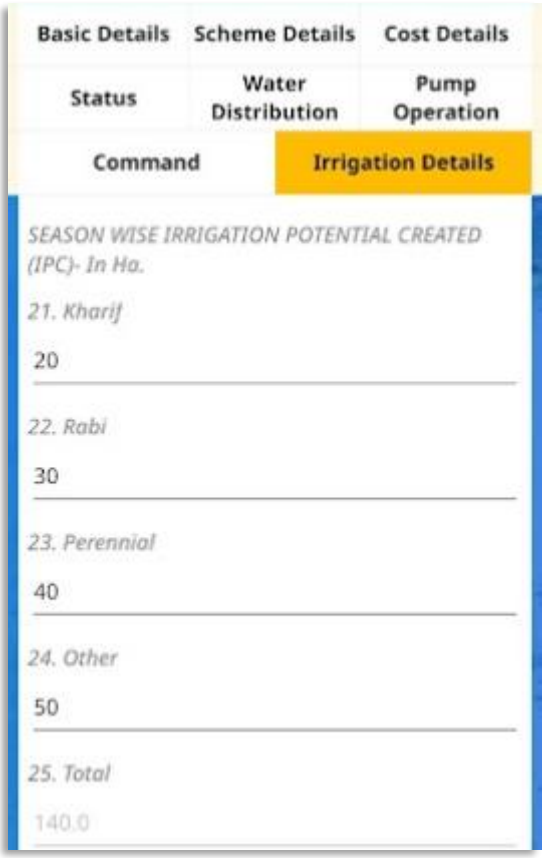
- Click Next to proceed to the Pump Operation tab and fill in the required fields.

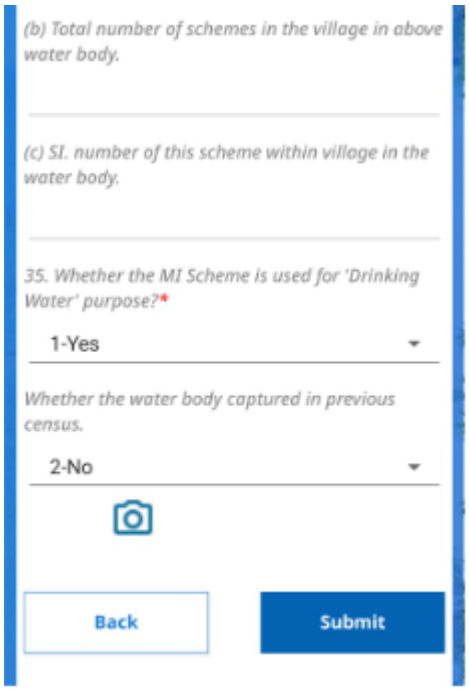


- Click Next to proceed to the Command tab and fill in the required fields.

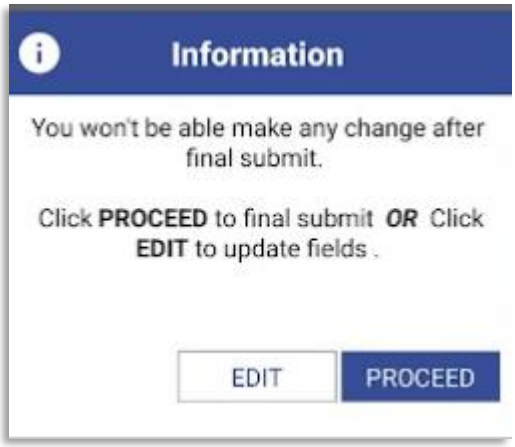


- Click Next to proceed to the Irrigation Details tab and fill in the required fields.





- After filling in all details, click Submit to trigger an information pop-up



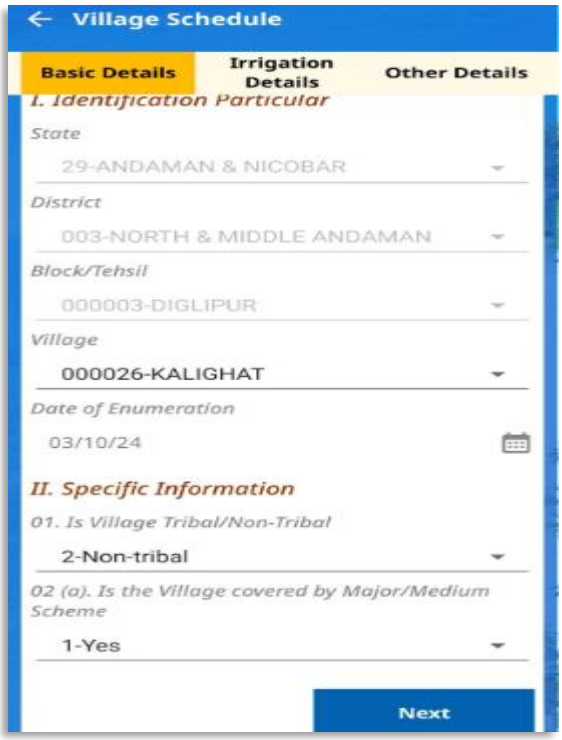
- Click 'Edit' to update the form, or click 'Proceed' to submit the data."

- Upon clicking the Proceed button, a success message will be displayed

5.2.4 Village Schedule

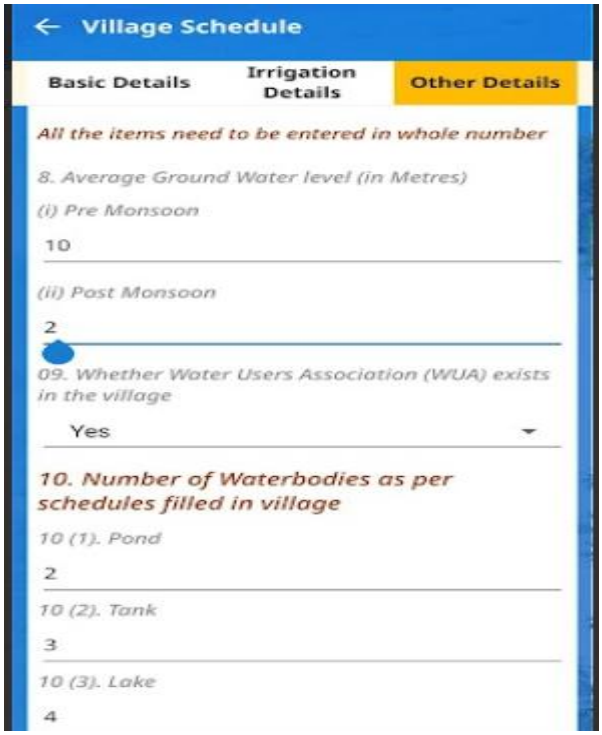
- Click on the Navigation Icon
- Select Village Schedule, Basic Details tab will open

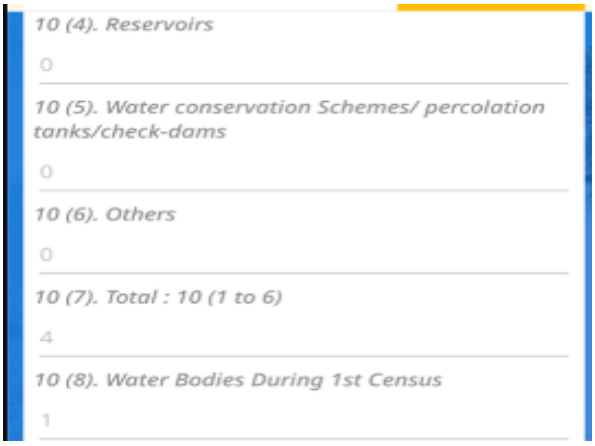
- The fields for State, District, and Block are pre-filled and disabled.
- Select the Village
- The following fields will be auto-populated from the first census
    - Is Village Tribal/Non-Tribal
    - Geographical Area
- Select Is village covered by Major/Medium scheme



- Click Next to proceed to the Irrigation Details tab and fill in the required fields.

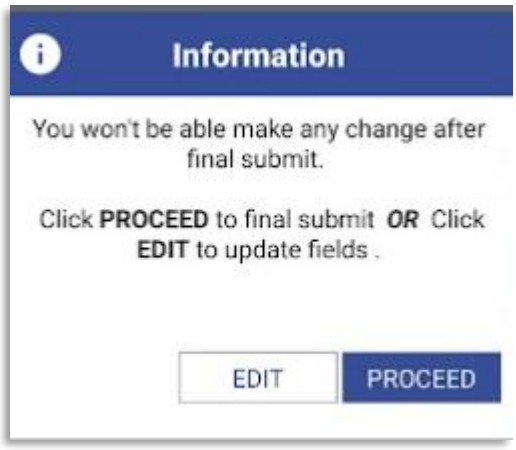
- Click Next again to proceed to the Other Details tab and complete the fields.


Village Schedule
Basic Details
Irrigation Details
Other Details
All the items need to be entered in whole number
8. Average Ground Water level (in Metres)
(i) Pre Monsoon
10
(ii) Post Monsoon
2
09. Whether Water Users Association (WUA) exists in the village
Yes
10. Number of Waterbodies as per schedules filled in village
10 (1). Pond
2
10 (2). Tank
3
10 (3). Lake
4


10 (4). Reservoirs
0
10 (5). Water conservation Schemes/ percolation tanks/check-dams
0
10 (6). Others
0
10 (7). Total : 10 (1 to 6)
4
10 (8). Water Bodies During 1st Census
1


Basic Details
Irrigation Details
Other Details
11. Summary of M I Schemes in the village as per all scheme schedules filled.
11(1) Ground Water Schemes During 6th Census
6th
77
7th
0
11(2) Surface Water Schemes During 6th Census
6th
0
7th
0
11(3)Total Schemes During 6th Census
6th
77
7th
0
Back
Final Submit

- After filling in all details, click Final Submit to trigger an information pop-up

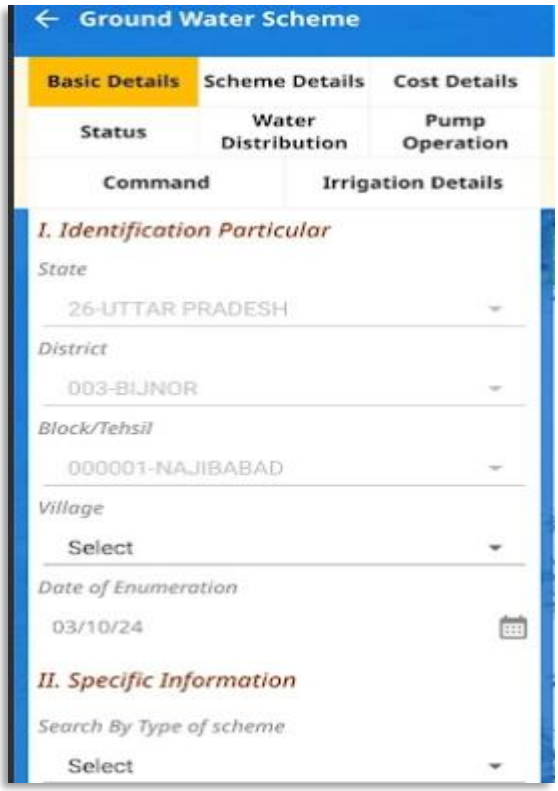


- Click 'Edit' to update the form, or click 'Proceed' to submit the data."
- Upon clicking the Proceed button, a success message will be displayed

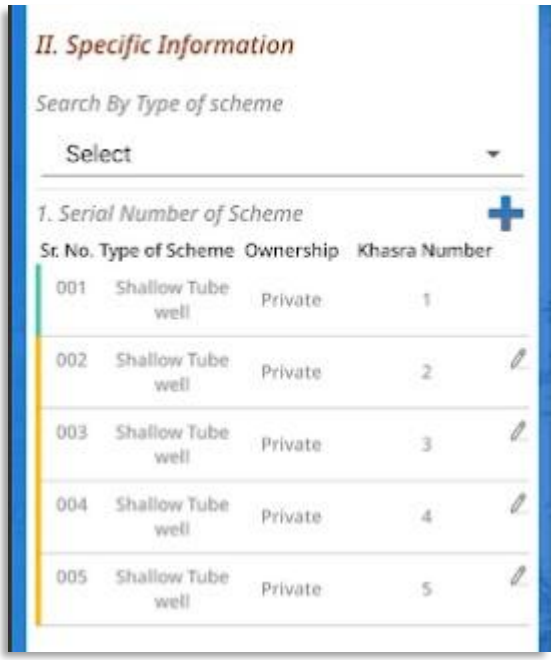
Note: -If the user is online, clicking on Proceed will synchronize the data immediately. If the user is offline, the data will be stored locally, and it will automatically synchronize once the user is back online.

5.2.5 Ground Water Schemes

- Click on the Navigation Icon
- Select Ground water schemes and Basic Details tab will open

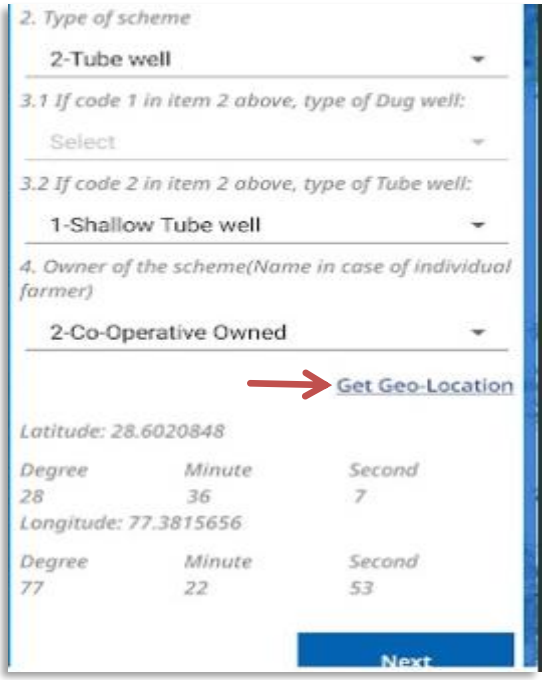


- The fields for State, District, and Block are pre-filled and disabled.
- Select the Village, and the Serial Number of the Scheme will be auto-filled based on the selected village.

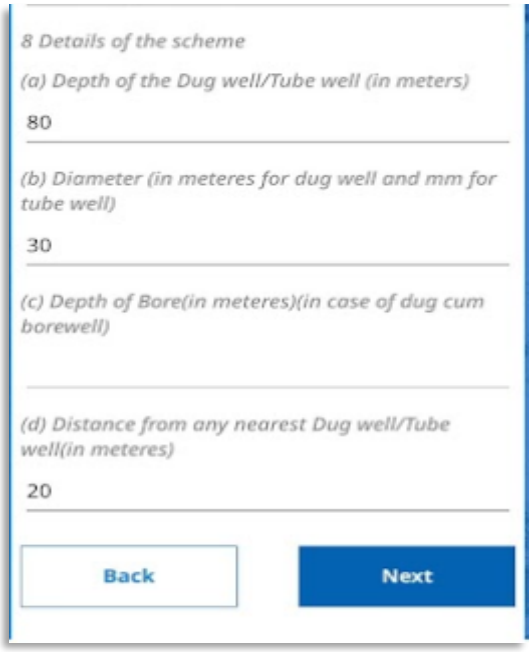


- Tap on any Serial Number with an edit icon to display a warning message.

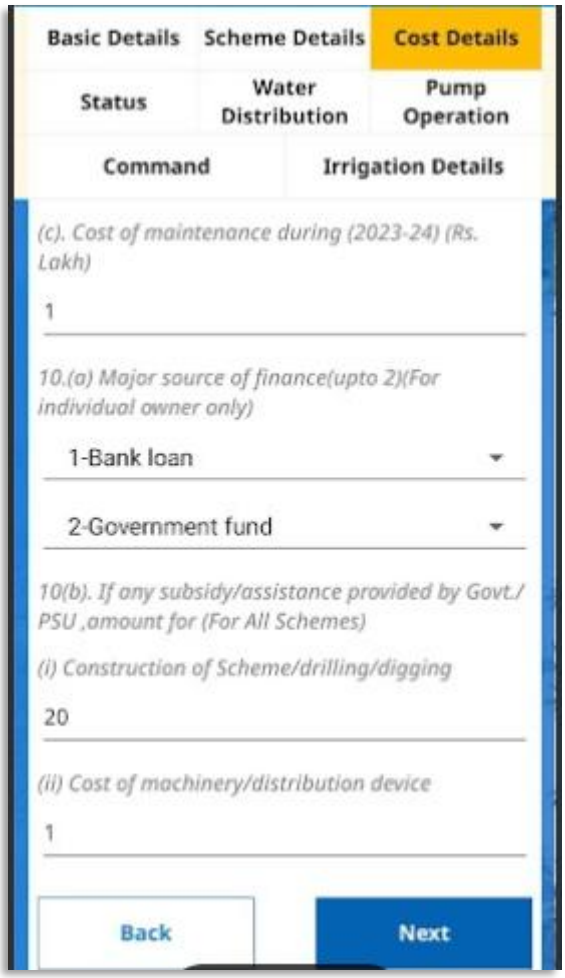
- The following fields will be auto-populated form the first census
    - Type of Scheme
    - Type of Tube Well/Dug Well
    - Owner of the Scheme
    - Geo Location(Latitude, Longitude)



- If the Geo Location is not available, click on Get Geo Location
- Click Next to proceed to the Scheme Details tab and fill in the required fields.
- Here following fields will be auto-populated from the first-census:-
    - 5(a)- Khasra Number/Plot No/Survey No in which the scheme is located
    - 5(b)-Location Particulars/Land Mark

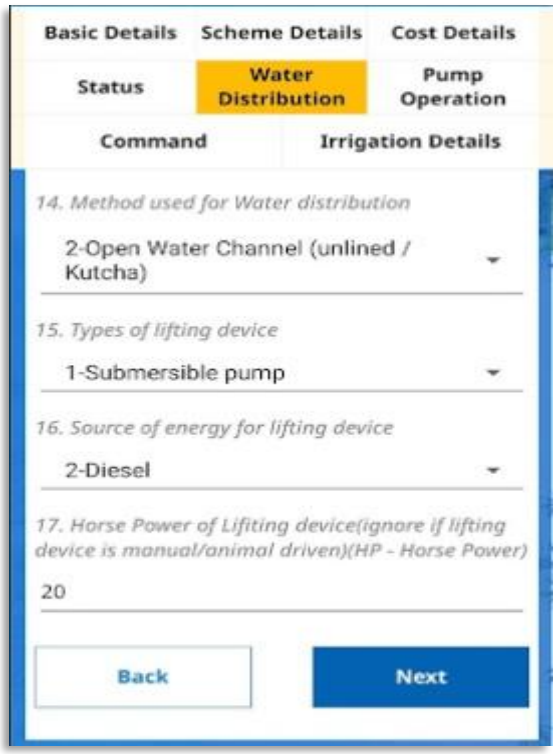


- Click Next to proceed to the Cost Details tab and fill in the required fields.
- Here following fields will be auto-populated from the first census: -
    - 9(a)- Cost of construction of the scheme



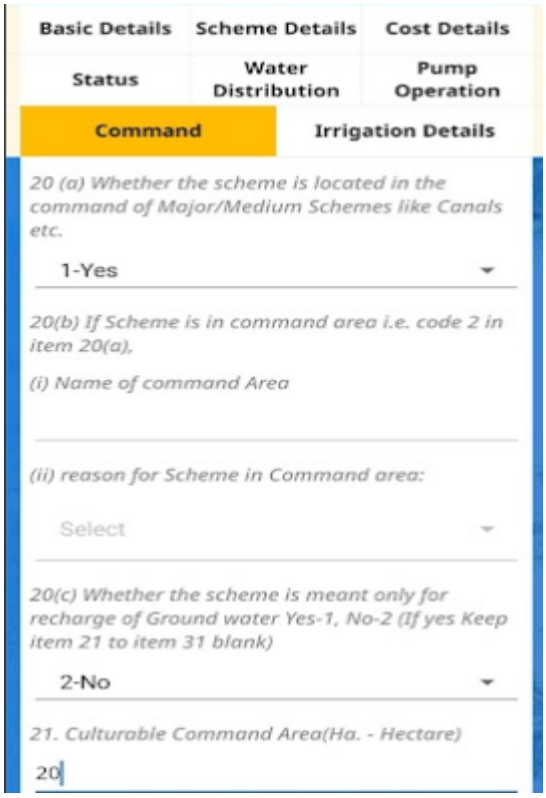
- Click Next to proceed to the Status tab and fill in the required fields.

- Click Next to proceed to the Water Distribution tab and fill in the required fields.

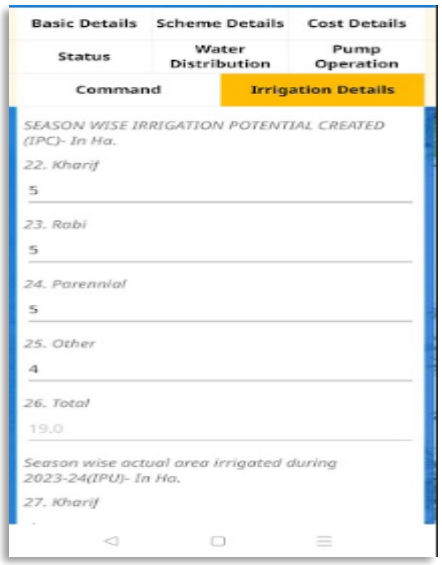


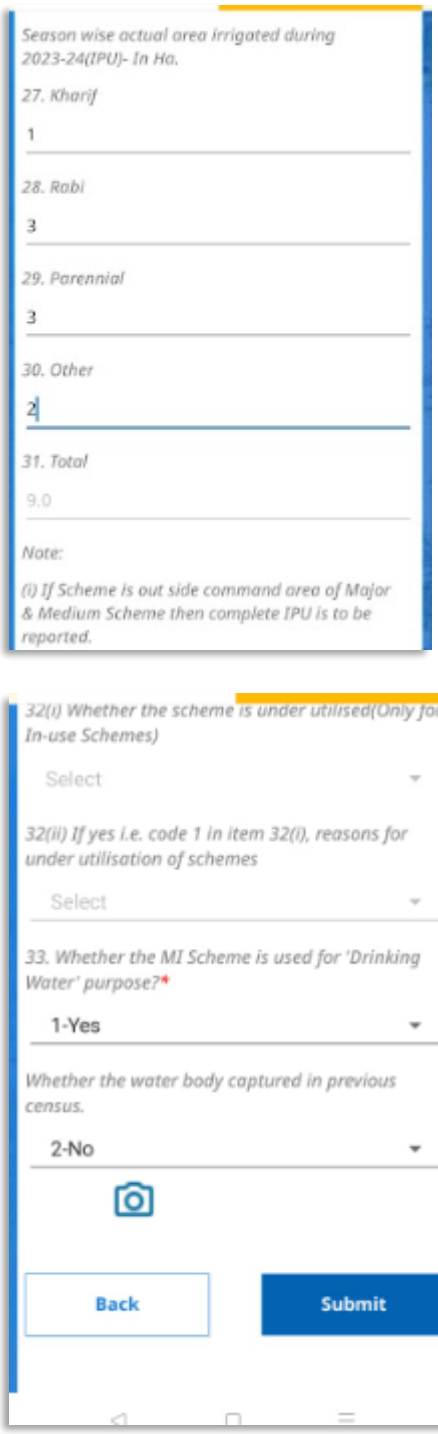
- Click Next to proceed to the Pump Operation tab and fill in the required fields.

- Click Next to proceed to the Command tab and fill in the required fields.

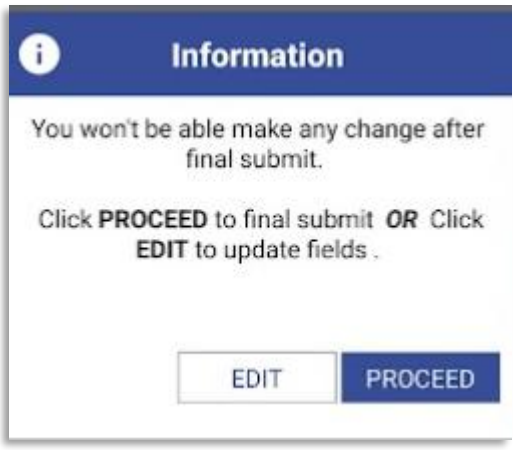


- Click Next to proceed to the Irrigation Details tab and fill in the required fields.





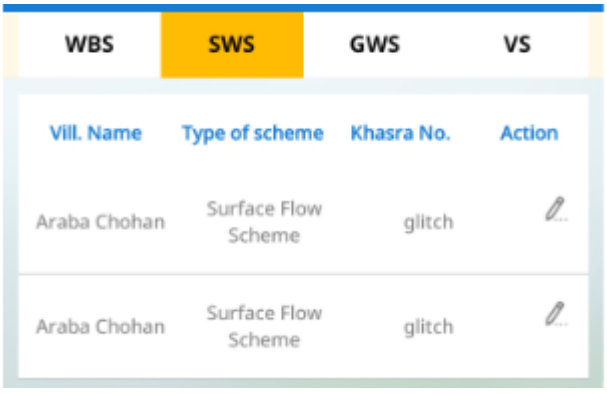
- After filling in all details, click Submit to trigger an information pop-up



- Click 'Edit' to update the form, or click 'Proceed' to submit the data."
- Upon clicking the Proceed button, a success message will be displayed

5.2.5 Validation Data

- Validation Data module allows Enumerator to view and update the warnings for all schedules.
- Click on validation Data

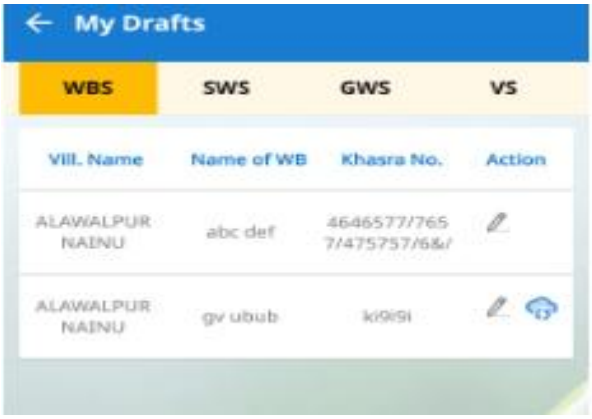


- To view the warning data of Schedules, click on respective schedules.
- Users can perform the following actions:-
    - Edit - Modify the Warning

Note: - Only warning implemented fields will be in enabled mode.

My Drafts

- Go to the Dashboard
- Click on My Drafts.
- The My Drafts section displays draft Data for the following schedules:-
    - Water Body
    - Surface Water
    - Ground Water
    - Village



- By default, pending data for the Water Body Schedule (WBS) will be displayed if there is any data available.
- To view the pending data of other Schedules, click on respective schedules.
- Users can perform the following actions on draft data:
    - Edit - Modify the Draft Entry
    - Sync - If there is any Scheduled data stored locally, the system will sync it with the MI Census server when connected.

***

CHAPTER SIX:

GENERAL INSTRUCTIONS FOR FILLING 2nd CENSUS OF WATER BODIES SCHEDULE

6.0 2nd CENSUS OF WATER BODIES

All Water bodies, as explained in definition of Water bodies, are to be covered in this Census irrespective of their uses, whether for irrigation or other purposes (e.g. industrial, pisciculture, domestic/ drinking, recreation, religious, ground water recharge etc.). The Water Body schedule is to be filled in both Rural as well as Urban areas. All water bodies in the villages as well as towns are to be listed and enumerated irrespective of their mention in the administrative records. It has to be ensured that no water body is left out. If any water body spreads in more than one village, it will be treated as one water body and only one schedule has to be canvassed for it.

6.1 IDENTIFICATION PARTICULARS

The name of the State/ District/ Block (Tehsil)/ Village/Ward will be recorded with respective codes of Local Government Directory (LGD). The application will pre-populate schemes listed in the 1st census of waterbodies with LGD codes, allowing enumerators to either confirm existing schemes or add new ones. There is a provision for selecting the waterbody on map using the SAC database. If the waterbody was shown in the map, then 'Yes' should be recorded; otherwise 'no' should be selected.

6.1.1 **Serial number of the Water body:** The water bodies in a village or town should be given running serial numbers. This will serve as an identification no. of that particular water body in that village. While giving serial no. of the water body, it is to be noted that data collection work has to be started from North-west corner of the concerned village and moving in serpentine way, serial numbers are to be given starting from 001. The serial number has to be given starting from 001 separately for water bodies in each village or town.

6.1.2 **Date of enumeration:** Date of enumeration has to be auto recorded in the format dd/mm/yy.

6.1.3 **Unique Identification key for water body:** This has been kept to have the unique code for identification of water body. 21 Digit code starting from rural/ Urban to serial number of the water body is to be given which will be combination of code for rural/ urban, State, District, Tehsil/ town/ block, village/ ward and its serial number. This will be auto generated in the mobile application.

6.2 SPECIFIC INFORMATION

6.1.4 **Item No. 1.1(a): Name of the Water body, if any, with specific permanent land marks:** If there is any name of the water body, the same may be written, otherwise, permanent land mark nearby water body may be written for easy identification of water body.

6.1.5 **Item No. 1.1(b): Name of Basin & Sub-basin in which water body is situated:** The name of Basin and Sub-basin in which water body is situated may be recorded in this item. The code, if available, may also be reported in the boxes provided in the schedule.

6.1.6 **Item No. 1.2(a): Type of Water body:** The type of the water body is to be recorded in this item in terms of code. The codes are:

Pond -1,
Tank -2,
Lake -3,
Reservoir -4,
Water Conservation Scheme/percolation tank/check dam -5,
Others -9.

Code 1 will be given in case of Ponds which are smallest in size. Code 2 may be given for tanks. A tank is neither very small nor very large but it may require a ferry or boat to cross it while ponds are small water bodies mostly kutcha in nature and do not require a ferry or boat for crossing from one side to the other. The lake may be little bigger than tank. The concept and definition may be looked in before assigning any code.

6.1.7 **Item No. 1.2(b):** If code in item 1.2(a) is 9 i.e. 'others', then the nature of storage may clearly be specified here.

6.1.8 **Item No. 1.3 Khasra No./ Plot No./ Survey No. in which the water body is located:** Khasra no./ Plot no./ Survey number, in which the water body is located, shall be noted against this item for physical verification etc. which may be needed at a later date. If the water body is spread in more than one village or town, khasra number/ plot number/ survey number of that village or town will be recorded in which maximum area of the

water body exists.

6.1.9 **Item No. 2 and 3: Latitude and Longitude (In degree, minutes, seconds):** The six digit latitude and longitude of the water body has to be captured by the mobile and has to be recorded in these items. The latitude and longitude of the water body may be preferably taken at its North West corner.

6.1.10 **Item No. 4: Whether located in DPAP/ Tribal/ DDP/ Flood prone/ Naxal affected area:** Appropriate code as per the location of water body may be given.

Code 1 is for Drought Prone Area Programme (DPAP)-1. The basic objective of the DPAP programme is to minimize the adverse effects of drought on production of crops and livestock and productivity of land, water and human resources ultimately leading to drought proofing of the affected areas. The programme also aims to promote overall economic development and improving the socio-economic conditions of the resource poor and disadvantaged sections inhabiting the programme areas.

Code 2 is for Tribal area depending upon the proportion of tribal population living in the area, as per definition in the state.

Code 3 is for Desert Development Programme (DDP). DDP was started both in hot desert areas of Rajasthan, Gujarat and Haryana and the cold deserts of Jammu & Kashmir and Himachal Pradesh in 1977-78. From 1995-96, the coverage has been extended to a few more districts in Andhra Pradesh and Karnataka.

Code 4 is to be given for flood prone area. The main flood prone areas are:

Ganga Basin: The Ganga Basin gets flooded mostly in the northern part by its northern tributaries. The badly affected states of the Ganga basin are West Bengal, Bihar and Uttar Pradesh. Besides the Ganga, rivers like Sarada, Rapti, Gandak and Ghagra cause flood in eastern part of Uttar Pradesh. The Yamuna is famous for flooding Haryana and Delhi. Bihar experiences massive dangerous flood every year. River Burhi, Bagmati, Gandak, Kamla along with many small rivers contribute to that. In West Bengal, rivers like Mahananda, Bhagirathi, Damodar, Ajay etc. cause floods because of tidal effects and insufficient river channels.

Brahmaputra and Barak Basins: The river banks of Brahmaputra and Barak get flooded due to the surplus water found in the Brahmaputra basin and the Barak basin. These rivers along with their tributaries flood the northeastern states like West Bengal, Assam and Sikkim. Jaldakha, Teesta and Torsa in northern West Bengal and rivers in Manipur often overflow their banks.

Central India and Deccan Rivers Basin: In Orissa, spilling over of river banks by Mahanadi, Baitarni and Brahmani causes havoc. The deltaic area formed by these three rivers is thickly populated. Even some small rivers of Kerala and mud stream from the nearby hills add on to the destruction. Southern and Central India observe floods caused by Narmada, Godavari, Tapi, Krishna and Mahanadi due to heavy rainfall. Cyclonic storms in the deltaic regions of Godavari, Mahanadi and Krishna even floods the coastal regions of Andhra Pradesh, Orissa and Tamil Nadu occasionally.

Code 5 is for naxal affected area and rest of the area can be given as code 9 i.e. others.

Appropriate code may be given depending upon the location of the water body. Above information/ list is illustrative not exhaustive. Thus, the information may be taken from district/block officials or knowledgeable person before recording it in the schedule.

6.1.11 **Item No. 5: Ownership:** The owner of the water body may be Government or Private. The appropriate code applicable may be given. The codes are:

State WRD/ State Irrigation	-1
Co-operative	-2
Panchayat	-3
Municipal authority	-4
Other Govt. agency	-5
Individual	-6
Group of Individuals	-7
other private body	-9

6.1.12 **Item No. 6(1): Whether water body is in use: Yes-1, No-2:** If the water body is being used for any purpose like irrigation, industrial, pisciculture, domestic/drinking, recreation, religious or ground water re-charge, it should be treated as in use irrespective of their use and code 1 may be recorded. In case, there is no use of water body or no physical existence of water body, then code 2 may be reported.

6.1.13 **Item No. 6(2): If in use i.e. code 1 in item 6(1) above:** If the water body is in use i.e. code 1 in item 6(1) above, then appropriate code for its use has to be reported in this item. The codes are:

Irrigation -1

Industrial – 2

Pisciculture – 3

Domestic/drinking – 4

Recreation – 5

Religious – 6

Ground water recharge – 7

Natural Habitat for birds and animals– 8

Other -9

If the water body is used for more than one type of use, maximum of three codes of use may be recorded in the order of preference of its use. For example, if a water body is primarily used for irrigation, but is also used for domestic purpose, code will be recorded as 1 in the 1st box and 4 in the 2nd box.

6.1.14 **Item No. 6(3) If water body is "in use" for irrigation i.e. code 1 in item 6(2), the CCA and IPC of Water body:** If the Water body is "in use" and is being used for Irrigation purpose then its Culturable Command Area (CCA) and Irrigation potential created (IPC) may be reported in hectares. If the information of CCA and IPC is not directly available from any records, the same information may be ascertained from local knowledgeable person like Patwari/Sarpanch/Gram Sevak. In addition, CCA and IPC of the schemes installed on the Water Body can also be utilized to derive CCA and IPC of water body. If the water body is spread in more than one village, efforts may be made to include all the area for arriving at CCA and IPC.

6.1.15 **Item No. 6(4) If not in use i.e. code 2 in item 6(1) above:** If the water body is not in use i.e. code 2 in item 6(1) above, appropriate code for its reason is to be reported in this item as applicable. The codes are:

Dried up	-1
Construction	-2

Siltation	-3
destroyed beyond repair	-4
Salinity	-5
due to industrial effluents	-6
others	-9

The status of its use/ not in use should be as on the date of survey. Code 1 will be reported only when code 2 to 6 is not applicable.

6.1.16 **Item No. 7(1): Nature of waterbody:** If the water body is natural code 1 may be reported. For the man-made water body (Dam, weir, constructed new pond/ tank in MGNREGA, etc.), code 2 is to be reported.

6.1.17 **Item No. 7(2): If man-made i.e. code 2 in item 7(1):** As per the nature of water body in terms of type of its construction i.e. whether it is earthen, made of concrete or masonry work is done, the applicable code is to be reported in this item. Otherwise, code 9 may be reported. If water body is constructed only from earthen kutcha material, code 1 may be reported. If water body is Pucca from Cement or concrete, code 2 may be given. If the water body is made up of bricks with masonry work, code 3 can be given. For rest of cases code 9 may be given.

6.1.18 **Item No. 8: Year of construction and cost (only for man-made):** If water body is manmade i.e. code 2 in item 7(1), the original cost incurred (in Rs.) at the time of its construction and year in which, it was made, is to be reported in this item.

6.1.19 **Item No. 9: Year of renovation/ repair (for all water bodies):** If any renovation or repair work of the water body has been done, the cost of latest renovation/ repair done (in Rs.) and year of latest renovation/ repair has to be recorded in this item.

6.1.20 **Item No. 10: Whether water body is under repair/ renovation/ restoration**: If the water body is presently under repair/ renovation/ restoration, code 1 will be reported else code 2 will be reported in this item. Information for items 10(1) to 10(6) will be recorded if water body is presently under repair/ renovation/ restoration.

Item 10(1) - name of the scheme is to be written under which the water body is under repair/ renovation or restoration.

Item 10(2) - Year of inclusion under the scheme

Item 10(3) - Targeted year of completion

Item 10(4) - Estimated cost

Item 10(5) - The target of potential revival in Ha. The target of potential revival relates to improvement and it will indicate additional potential likely to be increased due to repair/renovation/restoration.

Item 10 (6) - Irrigation Potential revived in Ha. The Irrigation Potential revived will indicate additional or partial potential revived so far.

6.1.21 **Item No. 11(1): Whether Water Body associated with Central Scheme**: If any water Body is covered under any central scheme, then code 1 may be reported, otherwise code 2 is to be reported. The term Central scheme refers to the schemes which has been formulated or designed and wholly or partially funded by Central Government.

6.1.22 **Item No. 11(2): Name of the Central Scheme under which given water body is covered:** If code 1 is selected in 11(1), then name of the central scheme is to be selected. The codes are:

Jal Jeevan Mission -1

Pradhan Mantri Matsya Sampada Yojana – 2

For any other central scheme other than the above mentioned -3

6.1.23 **Item No. 12(1): Does Water body contains water throughout the year:** If water body contains water throughout the year normally, then code 1 may be given, otherwise code 2 is to be reported.

6.1.24 **Item No. 12(2):** If code in item 12(1) is 2 i.e. 'No', appropriate code has to be recorded for number of months Water Body contained the water. Codes for this item are:

More than 9 months -1
6-9 months -2
less than 6 months -3

6.1.25 **Item No. 13: Water spread area of the water body during reference year 2023-24**

(in Ha): Water spread area of the water body has to be reported in hectares up to four decimal points. If the water body is spread in more than one village, efforts may be made to include all the area for arriving at water spread area. It is clarified that water spread area will have the meaning of area covered by water i.e. land occupied by water (submerged area). If majority of water spread area falls in one village, it has to be covered in that village.

6.1.26 **Item No. 13(1): Water spread area of the water body during current year (in Ha):** Water spread area of the water body has to be reported for the year when schedule is filling on the ground in hectares up to four decimal points.

6.1.27 **Item No. 13(2): Minimum Spread Area (in Ha):** Minimum Water spread area of the water body has to be reported in hectares up to four decimal points.

6.1.28 **Item No. 13(3): Maximum Spread Area (in Ha):** Maximum Water spread area of the water body has to be reported in hectares up to four decimal points.

6.1.29 **Item No. 14: Maximum depth of water body when fully filled up (in meters):** The maximum depth (in meters) of water body is to be recorded in this item. Even if the water body is not fully filled up at the time of data collection, depth would be recorded presuming it to be fully filled. For natural water bodies, depth can be determined by consulting local or knowledgeable individuals in the village. For man-made water bodies, depth information is typically available in administrative records.

6.1.30 **Item No. 15: Storage capacity of water body in thousand cu. meters:** The original storage capacity and present storage capacity of the water body in thousand cubic meters is to be reported in this item. Designed storage of all the tanks / ponds / reservoirs in the village may be obtained from the records if available for original otherwise with the help of surface area and the average depth of tank and their sum total may be estimated and recorded here. The designed capacity of the reservoir may be available in records as these are generally owned by public sector, i.e. owned by cooperatives/ govt. department and information may be taken from the records. In case of ponds/ tanks owned by individual farmers, its approximate volume in terms of thousand cubic meters may be estimated after conversion from local units as obtained from the owner.

6.1.31 **Item No. 16: Filled up Storage (during 2023-24):** The information for this item has to be collected for the reference year 2023-24 and appropriate code has to be recorded. Codes for this item are:

Full	-1
up to ¾	- 2
up to 1/2	-3,
up to 1/4	- 4

Nil/Negligible filled up– 5.

6.1.32 **Item No. 17: Whether silt is present in the water body which is reducing its capacity:** If the silt is present in the water body, 'yes' should be selected otherwise 'no' should be selected. Some local and knowledgeable person may also be contacted for obtaining this information.

6.1.33 **Item No. 18: Status of filling up of storage space (based on around 50% filling up of storage during last 5 years):** The appropriate code will be decided based on the information on 50% filling up of storage in last 5 years. The codes are:

Filled up every year	- 1
Usually filled up	- 2
Rarely filled up	- 3
Never filled up	- 4

For example, if a water body is filled up to or above 50% of its total capacity every year in the last 5 years, then code 1 will be recorded. If a water body is never filled up to or above 50% of its total capacity in the last 5 years, then code 4 will be recorded.

6.1.34 **Item No. 19(1): Number of Cities/ towns/ villages benefitted:** The number of cities/towns and number of villages benefitted by the water body under coverage has to ascertained and recorded in this item separately.

6.1.35 **Item No. 19(2): Number of people directly benefited by Water Body:** The number of people directly benefited by the Water body is to be reported in this item. In case, there is any problem in collecting exact number, the estimated number may be ascertained from local knowledgeable person and recorded.

6.1.36 **Item No. 20(1): Whether water Users Association (WUA) is formed (except individual Ownership):** If a water body users association is formed or associated for taking decisions on matters relating to utilization of water of the water body under consideration, code 1 will be recorded and if not, code 2 will be recorded. Efforts should be made to get the information. However, if the information is not available despite best efforts, then code 3 i.e. not known may be recorded. For the Water Bodies whose Ownership is Individual i.e code 6 in item 5 this has to be left blank.

6.1.37 **Item No. 20(2), If yes i.e. code 1 in item 20(1):** If in item 20(1) information is yes i.e. code 1, it may be possible that some area of Water body is not covered by Water Users Association. In this context, under following questions respective codes are given below:

i. Item 20(2) (a) – Extent of area covered by WUA

If the Water Users Association covers entire area of water body -1

If the Water Users Association covers partial area of water body- 2

ii. Item 20(2)(b) relates to the total number of Water Users Association (WUA) formed in a Water Body.

6.1.38 **Item No. 21: Whether water body included in District Irrigation Plan (DIP)/ State Irrigation Plan (SIP):** If the water body under survey is covered in District Irrigation Plan (DIP) or State Irrigation Plan (SIP), code 1 has to be recorded in this item else code 2 will be recorded. This information may be obtained from district officials.

6.1.39 **Item No. 22(1): Whether any area of water body is encroached (Yes-1, No-2):** If the water body or any part/ area of it has been encroached, code 1 has to be recorded else code 2 is to be recorded in this item. Encroachment on a water body refers to unauthorized entry into the defined boundary of the water body for various human activities like construction, agriculture etc. as observed by the enumerator.

6.1.40 **Item No. 22(2) and Item No. 22(3): If Yes in item 22(1):** If it is observed that the area of water body has been encroached then it has to be ascertained whether the encroachment area can be assessed approximately (percentage). If yes, then approximate percentage of area encroached may be given in item 22(3) in two digits

without decimal. To assess the area of encroachment, for water body owned by public authorities, the original water spread area can be enquired from the authority under which the Water Body is functioning.

6.1.41 **Item No. 23: Whether water body is standalone or connected:** If there is only one water body, then 'standalone' should be selected. If two or more water bodies are connected to each other (for e.g. by strait), then 'connected' should be selected.

6.1.42 **Item No. 23(1): If Connected, Number of Connected Water Bodies:** If the water bodies are connected, then number of connected water bodies should be recorded here.

6.1.43 **Item No. 24: Whether this waterbody was captured in previous Census:** If the waterbody was listed in the pre-populated data in the beginning, then 'Yes' should be recorded; otherwise 'no' should be selected. Even if the information is not pre-populated, the enumerator must inquire and determine whether the item was covered or not. If it was covered, then 'Yes' shall be recorded.

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CHAPTER SEVEN:

GENERAL INSTRUCTIONS FOR FILLING SURFACE WATER SCHEDULE

(7th MINOR IRRIGATION CENSUS)

7.0 SURFACE WATER SCHEDULES

All surface water schemes, namely, surface flow and surface lift schemes in the village which are mainly for irrigation purpose or are meant only for recharge of ground water will be included for filling surface water scheme schedule. All schemes in the village are to be listed and enumerated. It may be ensured that no scheme is left. It may be noted that if the command area of a scheme spreads in more than one village, in that case also it will be treated as one scheme only in the village where it is located. Schedules are to be filled up for schemes commissioned during or before 2023-24 only. However, the schemes which are ` permanently not in use' for irrigation purposes in 2017-18 or before will not be included in the coverage of this Census. Care may be taken not to miss any scheme. Separate schedule will be filled for each surface water scheme.

Schedules are to be filled up for schemes commissioned during or before 2023-24 only.

7.1 IDENTIFICATION PARTICULARS

The name of the State/ District/ Block (Tehsil)/ Village will be recorded with respective codes of Local Government Directory (LGD). This section also includes recording of Latitude and Longitude. Date of enumeration has to be auto-recorded in the format dd/mm/yy.

7.2 SPECIFIC INFORMATION

7.2.1 **Item No. 1: Serial No. of the Scheme:** The surface water schemes in a village should be given running serial numbers. This will be auto generated in the mobile application. This will serve as an identification no. of that particular surface water scheme in that village and it is to be noted that data collection work has to be started from North-west corner of the concerned village and moving in serpentine way. The application will pre-populate schemes listed in the 6th MI Census with LGD codes, allowing enumerators to either confirm existing schemes or add new ones.

7.2.2 Item No. 2: Type of Scheme: The type of the scheme is to be recorded in terms

of code as below:

Surface Flow Scheme -1
Surface Lift Scheme - 2.

Such schemes like ponds or tanks/ reservoirs with capacity of irrigation up to 2000 Ha with water distribution by way of flow through channels up to the fields will be included in surface flow scheme (code 1). Those schemes in which water is being lifted from drain/ rivers or pond/ tanks with the help of pump sets by diesel/ electric power or by manual/ animal driven method will be included in surface lift scheme. Any pond or tank which is not used for irrigation purposes and it is only for fishing/ drinking, such water bodies will not be considered for filling surface water scheme schedule. Such ponds/ tanks/ reservoirs may be within the residential area of the village or near the fringes of the village and sometimes away from the village as well. As such, due care may be taken with regard to such water bodies to know the use of such bodies with the help of knowledgeable persons of the village.

7.2.3 Item No. 3.1: If code 1 in item 2, nature of Surface Flow Scheme: If the Scheme is Surface Flow, the nature of scheme code may be recorded. Definition may be referred while recording nature of scheme which is given in Concept and Definition part. The codes are:

Reservoirs - 1
Tanks/ ponds -2
Other Storages -3
Permanent diversion - 4
Temporary diversion - 5
Water conservation-cum-ground water recharge schemes / percolation tanks/ check dams etc. – 6
Spring Channel - 7
Others – 9

Code 1 will be given in case of reservoirs which are larger in size and specially constructed for irrigation purposes. Code 2 may be given for ponds/ tanks. A tank is neither very small and nor very large but it may require a ferry or boat to cross it while ponds are small water bodies mostly kutcha in nature and do not require a ferry or boat for crossing from one side to the other. Permanent diversions are those which are

channels created to divert water from some surface water bodies for permanently diverting water for irrigation purposes. Temporary diversions are such diversions which are made for some time by kutcha construction for diverting water from some surface water bodies for irrigation purposes for short duration.

7.2.4 Item No. 3.2: If code 2 in item 2, Nature of Surface Lift Scheme: If the Scheme is Surface Lift, any one code from the codes given may be recorded.

On River	- 1
On Stream	- 2
on drain/ canal	- 3
On Tanks/ Ponds/ Reservoirs/ check dams	- 4
others	-9

7.2.5 **Item No. 4: Owner of the Scheme**: Name should be recorded in case of individual farmer being owner of the scheme and appropriate code should be given. Codes are:

Govt. Owned	- 1
Cooperative owned	– 2
Panchayat Owned	- 3
Owned by Group of Farmers	– 4
Owned by individual farmer	- 5
Others	– 9

The owner of the scheme may be farmer /cooperative society/ government department / organization / group of farmers. The type of ownership is to be indicated in this item with code. In case of absentee, it may be enquired from the neighbor or from the person who is in possession of the scheme.

7.2.6 Item No.5: Khasra No./ Plot No./ Survey No. in which the scheme is located: Khasra no./ Plot no./ Survey no. in which the scheme is installed shall be noted against this item for physical verification etc. which may be needed at a later date.

7.2.7 Item No. 6(a): Total holding of the Owner (in case of individual owner only): This item should be filled up in case of individual owner only. The total area owned by the owner in any part of the country is to be recorded in hectares. The land owned by

owner of the scheme in his/ her name will be mentioned in ha up to 3 decimal points against this item. At the time of filling of this schedule, if the ownership holding is available in local units, it may be noted by pencil as such and later at the time of finalizing the schedule, local units may be converted into ha with the help of calculator and then it should be filled.

7.2.8 **Item No.6 (b): Social Status of owner (in case of individual owner only):** Appropriate code for social status, scheduled caste, scheduled tribe, OBC or others as the case may be, will be given in case of individual owner only.

Schedule Caste – 1
Schedule Tribe - 2
OBC - 3
Others – 9

The social status as per the central govt. notification may only be used. In some states, some castes have been recognized as special backward classes only within the state for state govt. jobs but not for central govt. purpose. Such classifications should not be considered. If a caste is included in SC, ST or OBC for All India selection, then only it should be considered for particular classification.

7.2.9 Item No.6 (c): Gender of Owner (in case of individual owner only): The code for gender of owner is to be reported in this item**.** The codes are:

Male – 1
Female -2
Transgender -3

7.2.10 **Item No.7:** Year of Commissioning of the scheme: Appropriate code for the year of commissioning of the scheme should be mentioned. The schemes which were installed during 2018-19 or before are to be indicated with code number '1' The codes are:

On or before 2018-19 – 1
During 2019-20 – 2
During 2020-21 – 3

During 2021-22 – 4

During 2022-23 – 5

During 2023-24 -6

7.2.11 **Item No 8(a): Cost of construction of Scheme (in Rs.):** The cost of construction (excluding the cost of machinery) of the scheme at the time of its installation will be reported in this item. Cost of the construction in case of surface water schemes may include cost of labour for digging the pond/ tank/ other storage or diversion with or without masonry work and it may include cost of land in case land is actually purchased by the owner for constructing water body.

7.2.12 **Item No 8(b): Cost of Machinery (in Rs.):** Any cost of machinery for motor/ pump/ water distribution devices like pipe, drip or sprinkler, solar power panel should be included in the cost of machinery in this item in Rs. It may include cost incurred on purchasing such equipment over the years.

7.2.13 **Item No 8(c): Cost of maintenance during the year 2023-24 (in Rs.):** It may be noted in Rupees taking into account the repair and maintenance expenses borne on the scheme during the reference year 2023-24. The nature of replacements and additions to machinery may not be included here but in the cost of machinery. Maintenance cost will include cost of de-silting of pond/ tank/reservoir and other storage, repair of the boundaries/ channels or lifting device, pipes etc.

7.2.14 Item No 9(a): Major Sources of finance (up to 2) (This item should be filled up in case of individual owner only): It is intended to find out two major sources of financing of the scheme which could be through farmers' own savings, bank loan or Government fund. Appropriate codes will be recorded in this item. In case the scheme is financed by two or more sources, the source from which larger amount has been taken is to be recorded in first place and the second important source in the second space. The codes are:

Bank Loan - 1

Government fund -2

Own savings - 3

Money lender – 4

others – 9

In this item, the source of money for constructing the scheme or purchasing machinery may be considered. In case money is neither taken from government or from bank/ money lenders then either it may be from own savings or from friends and relatives. In case there is interest on loan from friends/ relatives, it should be classified as from money lenders. Loan from co-operative societies may be taken as govt. loan and from co-operative banks or Gramin banks/ land development banks; it should be included in bank loan.

7.2.15 **Item No 9(b): If any subsidy/ assistance provided by Govt./ PSU:** In this item amount of subsidy received for construction of the MI scheme or for purchase of machinery for installation of scheme or for machinery including water distribution system will be noted in Rupees separately (i) for cost of construction/digging, (ii) for cost of machinery/distribution device etc. If any subsidy or financial assistance is provided for construction or for machinery it may be noted in this item. In case MGNREGA assistance is provided for construction, the same may be valued and included against this item for the concerned part.

7.2.16 **Item No. 10 (a): Current Status of the Scheme:** The information whether the scheme is "in use" at present or "not in use" temporarily or permanently will be recorded in codes.

In use - 1

Temporarily "Not in use" – 2

Permanently "Not in use" – 3

As mentioned earlier, the reference year for 7th MI Census is 2023-24. The scheme, which is not 'in use' during last two years before the reference year i.e. 2021-22 and 2022-23 due to temporary reasons but has also not been abandoned for use, is categorized as temporarily `not in use'. The remaining schemes i.e. the schemes excluding 'in use' and 'temporary not in use' may be classified as 'permanently not in use'.

7.2.17 **Item No. 10 (b): Number of years not in use:** The period in number of years since

'not in use' will be noted against this item. It will be noted for both 'temporarily not in use' and `permanently not in use'. The schemes which are out of use in 2017-18 or before would be out of coverage of 7th MI Census.

7.2.18 Item No.11: If code 2 in item 10(a), reason for "Temporary not in use" Scheme: Reason should be given in code for the schemes which are temporarily "not in use". Codes are as under:

Non availability of adequate power/ fuel	- 1
Mechanical breakdown	- 2
Less discharge of water	- 3
Non availability of finance	- 4
Storage not filled up fully	- 5
Siltation of Canal/ Storage	- 6
Breakdown of channels	-7
Any other reason	- 9

7.2.19 **Item No. 12: If code 3 in item 10(a), reason for "Permanently not in use" Scheme:** Reason should be given in code for the schemes which are permanently "not in use". Codes are:

Due to salinity	– 1
Dried up	– 2
Destroyed beyond repair	– 3
Due to sea water intrusion	-4
Due to industrial effluents	-5
Availability of Major/Medium Irrigation Project	-6
Due to sinking	- 7
Due to other reason	- 9

7.2.20 Item No 13: Method used for Water distribution: Farmers are adopting different type of water distribution devices for irrigation. Sprinkler and drip irrigation methods have gained popularity among the farmers besides conventional methods of ground water channel. Appropriate code is to be indicated for the water distribution devices

being used by the farmers.

Open Water Channel (lined/ pucca)	- 1
Open Water Channel (unlined/ kutcha)	- 2
Under Ground Pipe	- 3
Surface Pipe	-4
Drip	- 5
Sprinkler	- 6
Others	- 9

7.2.21 **Item No 14: Type of Lifting Device (Only for Surface lift scheme):** The type of device used for lifting water from the source is to be indicated here by appropriate code. The codes are:

Submersible Pump	- 1
Centrifugal Pump	- 2
Turbine/Jet pump	– 3
Manual/animal	– 4
others	– 9

7.2.22 **Item No 15: Source of Energy (Only for surface lift scheme):** The source of energy used for operating lifting device for lifting water is to be indicated by appropriate code. Codes are:

Electric	- 1
Diesel	– 2
Wind Mill	– 3
Solar	– 4
others	- 9

7.2.23 **Item No. 16: Horse Power of Lifting device (ignore, if lifting device is manual/animal):** Horse power of lifting device (only for surface lift scheme) is to be recorded.

7.2.24 **Item No. 17: Number of days pump operated (ignore, if lifting device is manual/animal):** These are to be given for each season separately as per actual

number of days of operation as informed by the farmer.

7.2.25 **Item No. 18: Average Hours of pumping per day:** These are to be given for each season separately as per actual average number of hours operated as informed by the farmer.

7.2.26 **Item No. 19(a): Whether the scheme is located in the command of Major and Medium Schemes like Canal etc.:** Some of the minor irrigation schemes may be located in the command of major/ medium schemes for conjunctive use. Such schemes are also to be enumerated. The appropriate code depending upon their use may be noted in this item as:

Yes -1
No - 2

7.2.27 **Item 19(b): If the scheme is in command area i.e. code 1 in item 19(a):** (i) Name of the MMI project needs to be recorded against this item. (ii) Normally, it is expected that there should be less number of MI scheme in the command area of major/ medium schemes as the water may be available for irrigation from Medium or Major Scheme. Despite that if any MI scheme exists in the command area, the reason for the same may be reported. The codes are:

Water not available up to field from major/medium scheme-1,
Water available but not adequate for irrigation-2,
Water available but no useable for irrigation-3,
other reasons-9.

The name of command area may be reported in item 19b(i) and the reason code for scheme in the command area may be reported in item 19(b)(ii).

7.2.28 **Item 19(c): Whether the scheme is meant only for recharge of Ground water**: Yes-1, No-2: There may be schemes which are not used for irrigation and merely for augmentation i.e. the scheme is meant only for recharge of Ground water. In such cases, code 1 can be given and item 20 to 30 should be left blank. This type of cases may be very few. Most of cases would be scheme meant for irrigation i.e. having code 2 in item 19 (c).

7.2.29 **Item No.20: Culturable Command Area (CCA) (in Ha.):** In this column, the area proposed to be irrigated by the scheme during reference period should be indicated in hectare. It is generally the measurement of the field proposed to be irrigated by the scheme at the time of installation. In case the scheme is very old and the old culturable command area is not feasible, due to change in land use etc., the current maximum culturable command area of the scheme will be noted. If the CCA is spread over to another village also, the whole CCA for the scheme may be entered in the village where it is located.

7.2.30 Item No 21 to Item No 25: Season wise Irrigation Potential Created (IPC): It is intended to find out the gross irrigation potential created from the scheme. It will indicate the area under Kharif, Rabi, perennial crops and other seasonal crops proposed to be irrigated. The total of item 21 to 24 is to be noted in item 25. The figures under item 21, 22 & 24 should be season wise area proposed to be irrigated by the scheme. The figure under item 23 is for perennial crops. If the scheme has been improved upon then revised potential is to be indicated. Item 25 will indicate the gross irrigation potential created. Irrigation potential will be recorded up to two places of decimals.

7.2.31 Item No 26 to Item No 30: Season wise actual area irrigated during 2023-24 (IPU): In these columns, the area actually irrigated under kharif, rabi, perennial crops and other seasonal crops during the year 2023-24 shall be reported. Item 30 will indicate the gross irrigation potential utilised. Figure in item 30 would normally be less than or equal to the figure in item 25.

There may be some minor irrigation schemes which are located in the command area of major/ medium irrigation projects and serve the purpose of supplementary irrigation. For example, a lift scheme on Tank/ Pond/ Drain may be in the command area of Major or Medium Scheme. In order to assess the extent of such supplementary irrigation, data is to be recorded in item 26 to 30.

For recording the potential utilized through the scheme which are situated in command area of Major/medium irrigation project in such cases, gross irrigated area will be divided in proportion to number of times MI scheme is used to irrigate the field. For example, if the field is irrigated two times by M.I. scheme and three times

by major / medium scheme, then irrigation potential utilized by M.I. scheme will be 2/5 times of the field area.

7.2.32 **Item No 31(i): Whether the scheme is underutilized (Only for In-use Schemes):** For in-use schemes, it has to be ascertained whether it is under-utilized and if Yes, code 1 is to be given otherwise code 2 is to be given. Scheme shall be considered under-utilized if the IPU is significantly less than IPC.

If a MI Scheme is in the Command Area of Major/ Medium Scheme and IPU of the Scheme is less **than IPC, even then it may not be underutilized** as it is providing the necessary supplementary irrigation. It is clarified that for the schemes outside the command area, schemes shall be considered underutilized if the IPU in item 30 is significantly less than IPC in item 25 and scheme is outside the command area i.e. code 1 in Item 19 (a). Further, for schemes within the Command Area, ratio of IPU to IPC will not be the actual deciding factor for underutilization of the scheme. Enumerator has to decide on the actual situation of the scheme in the field. Similarly, for the schemes meant only for recharge of ground water, enumerator has to decide whether scheme is underutilized or not on the basis of actual situation of the scheme in the field, since, IPC and IPU are not relevant in these types of schemes.

7.2.33 **Item 31(ii): If yes, i.e. code 1 in item 31(i), reasons for underutilization of scheme:** If Scheme is underutilized, reason for underutilization of the scheme is to be mentioned in terms of codes. The codes are:

Non availability of adequate power	– 1
Mechanical break-down	– 2
Less discharge of water	– 3
Storage not fully filled up	-4
Siltation of Canal/ Storage	-5
Breakdown of Channels	-6
Any other reason	- 9

7.2.34 **Item No. 32: Number of villages covered by the scheme:** The number of villages covered by the scheme will be noted against this item. Even if a scheme is used for irrigation in more than one village, its particulars will be included in the schedule

under the village where scheme is located and its entire irrigation potential created or irrigation potential used will be covered in one schedule in the village where that scheme is located.

7.2.35 **Item No. 33: Specific Features of Reservoirs, Tanks etc.:** It is intended to collect some specific information regarding the surface water scheme used for storing water. Information regarding storage in items 33(a) to 33(c) have to be filled only if information in item 3.1 is either code 1,2, 3 or in Item 3.2, it is 4. It may be noted that if there are more than one surface lift schemes in a Pond/ Tank /Reservoir/Other storage, then item 33(a) to item 33(c) has to be recorded in the schedule of 1st surface lift scheme only on that Pond/ Tank /Reservoir/Other storage. In other surface lift scheme schedules on same Pond/ Tank /Reservoir/other storage, items 33(a) to item 33(c) will be left blank to avoid duplication of data.

a) **Designed Storage (in cubic meters):** Designed storage of the tank/ pond/ reservoir under survey may be obtained with the help of surface area and the average depth or from the records, if available. The designed capacity of the reservoir may be available in records as these are generally owned by public sector, i.e. owned by cooperatives/ govt. department and information may be taken from the records. In case of ponds/ tanks owned by individual farmers, its approximate volume in terms of cubic meters may be estimated after conversion from local units as obtained from the owners.

b) **Filled up Storage (during 2023-24):** The information may be recorded in codes:

Full	-1
up to 3/4	- 2
up to ½	-3
up to ¼	- 4
Nil/ Negligible filled up	– 5

The Code will be entered depending upon the extent of filling up of storage during reference period.

c) **Status of filling up of storage:** The appropriate code will be decided on the basis of 50% filling up of storage in last 5 years. The codes are

Filled up every year	– 1
Usually filled up	- 2

Rarely filled up - 3

Never filled up - 4

7.2.36 Item No. 34: Specific information relating to Water Body:

a) **21 Digit water body serial number as per water body schedule**: If the surface water scheme is on a water body, then 21-digit water body code on which this surface water scheme is installed shall selected from the drop down.

b) **Total number of schemes in the village in above water body:** Total number of schemes installed on the water body (within village) has to be reported in item 34(b).

c) **Serial number of this scheme within the village in the water body**: This is serial number of the scheme on the water body with Unique ID reported in item 34(a). Last serial number reported in col. 34 (c) will be equal to total number of schemes reported in the item 34(b).

7.2.37 **Item No. 35: Whether the MI Scheme is used for 'Drinking Water' purpose?** If the MI scheme is used in providing 'drinking water' then 'yes' should be selected otherwise 'no' should be selected.

7.2.38 **Item No. 36: Whether the scheme was captured in previous Census:** If the scheme was listed in the pre-populated data in the beginning, then 'Yes' should be recorded; otherwise 'no' should be selected. Even if the information is not pre-populated, the enumerator must inquire and determine whether the item was covered or not. If it was covered, then Yes shall be recorded.

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CHAPTER EIGHT:

GENERAL INSTRUCTIONS FOR FILLING GROUND WATER SCHEDULE

(7th MINOR IRRIGATION CENSUS)

8.0 GROUND WATER SCHEDULES

All ground water schemes viz., Dug wells, Shallow Tube Wells, Medium Tube Wells and Deep Tube Wells in the village which are mainly for irrigation purpose and are complete, will be listed and enumerated. Ground water schemes which are used for irrigation purpose or are meant only for recharge of ground water will be included for filling ground water scheme schedule. In such schemes which are `permanently not in use' for irrigation purposes in 2017-18 or before will not be covered in this Census. It may be ensured that no eligible scheme is missed. It may be noted that if the command area of a scheme spreads in more than one village, in that case also it will be treated as one scheme only in the village where it is located. Separate schedule will be filled for each ground water scheme.

Schedules are to be filled up for schemes commissioned during or before 2023-24 only.

8.1 IDENTIFICATION PARTICULARS:

The name of the State/ District/ Block (Tehsil)/ Village will be recorded with respective codes of Local Government Directory (LGD). This section also includes recording of Latitude and Longitude. Date of enumeration has to be auto recorded in the format dd/mm/yy.

8.2 SPECIFIC INFORMATION:

8.2.1 **Item No 1: Serial No. of the Scheme:** The ground water schemes in a village should be given running serial numbers. This will be auto generated in the mobile application. This will serve as an identification no. of that particular ground water scheme in that village and it is to be noted that data collection work has to be started from North-west corner of the concerned village and moving in serpentine way. The application will pre-populate schemes listed in the 6th MI Census with LGD codes, allowing enumerators to either confirm existing schemes or add new ones.

8.2.2 **Item No. 2: Type of Scheme**: Type of the scheme, whether it is Dug well or Tube well/ borewell, is to be recorded in this item. If it is Dug well code 1 to be given and code 2

will be reported for Tube well/borewell. If in one dug well more than one bore wells are installed and the irrigated area from different borings is common, it will be treated as one scheme. However, if the irrigated area is different for different borings in a dug well, each boring will be treated as a separate scheme and separate schedules will be filled for each scheme.

8.2.3 **Item No 3.1: If code 1 in item 2, type of Dug well:** In case there is a dug well in which bore well has been installed, it should be classified as dug-cum-bore well and code 1 to be given in item 3.1. If a well is not dug-cum-bore well then only it should be classified either as Pucca or Kutcha well depending on its walls being masonry or of Kutcha material. No dug-cum-bore well should be classified as Pucca or Kutcha well. The code for Dug well Pucca is 2 and Dug well Kutcha is 3. Any other type of dug well can be classified as code 9.

8.2.4 **Item No 3.2: If code 2 in item 2, type of Tube well:** The codes are 1 for Shallow Tube well, 2 for Medium Tube well, 3 for Deep Tube well and 4 for Artesian well. In case of Tube wells, those having depth of bore up to 35 meter will be classified as shallow tube wells, while those tube wells having depth of bore in the range 35-70 meters will be classified as medium tube wells. Tube wells having depth of bore more than 70 meters will be included in deep tube wells. Artesian wells are those from which water flows under natural pressure without pumping.

8.2.5 **Item No. 4: Owner of the Scheme:** Name of the owner should be recorded in case of individual farmer being owner of the scheme and appropriate code should be given.

Govt. Owned	- 1
Cooperative owned	– 2
Panchayat Owned	– 3
Owned by Group of Farmers	– 4
Owned by individual farmer	– 5
Others	– 9.

The owner of the scheme may be farmer /cooperative society/government department / organization / group of farmers. The type of ownership is to be indicated in this item with code. In case of absentee, it may be enquired from the neighbor or from the person who is in possession of the scheme.

8.2.6 **Item No.5 (a): Khasra No./ Plot No./ Survey no. in which the scheme is located:** Khasra no./ Plot no./ Survey no./ in which the scheme is installed shall be noted against this item for physical verification etc. which may be needed at a later date.

8.2.7 **Item No.5 (b) Location particulars:** Location particulars of the schemes will be given based on permanent land marks, so that it can be uniquely identified. While each MI scheme will be given a number in the village, it will be marked by paint on the body of the scheme which is easily visible. However, location particulars with the help of permanent landmarks giving existence of some unique feature on any side of the scheme, plot where it is located should be mentioned e.g. any tree by name, building, temple, any small structure created or existence of any hill/drain/canal/road in any direction of the scheme.

8.2.8 **Item No. 6(a): Total Ownership holding of the Owner (0.000 Ha.):** This item should be filled up in case of individual owner only. Total area owned by the owner in any part of the country is to be mentioned in hectares. The land owned by owner of the scheme in his/ her name only will be mentioned in ha with 3 decimal points against this item.

8.2.9 **Item No.6 (b): Social Status of owner (in case of individual owner only):** Appropriate code for social status, scheduled caste, scheduled tribe, OBC or others as the case may be, will be given in case of individual owner only. The codes are:

Schedule Caste – 1,
Schedule Tribe - 2,
OBC - 3,
Others – 9.

The social status as per the central govt. notification may only be used. In some States, some castes have been recognized as special backward classes only within the state for state govt. jobs but not for central govt. purpose, such classifications should not be considered. If a caste is included in SC/ST or OBC for All India, selection then only it should be considered for particular classification.

8.2.10 **Item No.6 (c): Gender of Owner (in case of individual owner only):** The code for gender of owner is to be recorded against this item. The codes are:

Male -1

Female -2

Transgender -3

Item No.7: Year of Commissioning of the scheme: Appropriate code for the year of commissioning of the scheme should be mentioned. The schemes which were installed during 2018-19 or before are to be indicated with code number '1'. The codes are:

On or before 2018-19	– 1
During 2019-20	– 2
During 2020-21	– 3
During 2021-22	– 4
During 2022-23	– 5
During 2023-24	– 6

The schemes to be covered in 7th MI census may be properly understood. In ground water schemes, such dug wells commissioned during 2017-18 or before and are **permanently 'not in use' should not be included**.

8.2.11 **Item No. 8: Details of the Scheme:** The depth of Dug well/tube-well/dug-cum-bore well, diameter, depth of bore (In case of Dug-cum bore well), distance from any nearest well/ tubewell will be noted in meters (except for diameter of tube well which will be recorded in mm).

8.2.12 **Item No 9(a): Cost of construction of Scheme (in Rs.):** The cost of construction (excluding the cost of machinery) of the scheme at the time of its installation will be reported in this item. Cost of construction of the scheme should include cost incurred in construction of well/ tube well including cost of drilling, cost of masonry work for lining the channels or construction of water distribution joint, small hut or room covering the well/ tube well including labour cost. In case of tube well, the cost incurred for installing one or more poles for bringing electric cable up to the tube well site should also be included.

8.2.13 **Item No 9(b): Cost of Machinery (in Rs.):** Any cost of machinery for motor/ pump/ water distribution devices like pipe, drip or sprinkler, solar power panel should be included in cost of machinery in this item in Rs. It may include cost incurred on purchasing such equipment over the years.

8.2.14 **Item No 9(c): Cost of maintenance during the year 2023-24 (in Rs.):** It may be noted in Rupees taking into account the repair and maintenance expenses borne on the schemes during the reference year 2023-24. The nature of replacements and additions to machinery may not be included here.

8.2.15 **Item No 10(a): Major Sources of finance (This item should be filled up in case of individual owner only):** It is intended to find out two major sources of financing of the scheme which could be through farmers' own savings, bank loan or Government fund. Appropriate codes will be recorded in this item. In case the scheme is financed by two or more sources, the source from which larger amount has been taken is to be recorded in first place and the second important source in the second space. The codes are:

Bank Loan	- 1
Government fund	- 2
Own savings	- 3
Money lender	– 4
Others	– 9

In this item, the source of money for constructing the scheme or purchasing machinery may be considered. In case money is neither taken from government or from bank/ money lenders then either it may be from own savings or from friends and relatives. In case there is interest on loan from friends/relatives, it should be classified as from money lenders. Loan from co-operative societies may be taken as govt. loan and from co-operative banks or Gramin banks/ land development banks, it should be included in bank loan.

8.2.16 **Item No 10(b): If any subsidy/ assistance provided by Govt./ PSU:** In this item, amount of subsidy received for construction of the MI scheme or for purchase of machinery for installation of scheme or for machinery including water distribution system will be noted in Rupees separately (i) for cost of construction/drilling/digging (ii) for cost of machinery/distribution device etc. If any subsidy or financial assistance is provided for construction of well/ tube well or for machinery it may be noted in this item. In case MGNREGA assistance is provided for construction of well/ tube well or for water channel or under-ground installation of the same, it may be valued and included against this item for the concerned part.

8.2.17 **Item No. 11 (a): Current Status of the Scheme:** The information whether the scheme is "in use" at present or "not in use" Temporarily or Permanently will be recorded in codes.

In use	- 1
Temporarily "Not in use"	- 2
Permanently "Not in use"	- 3

As mentioned earlier, the reference year for 7th MI Census is 2023-24. The wells which are not 'in use' during last two years before the reference year i.e. 2021-22 and 2022-23 due to temporary reasons but has also not been abandoned for use are categorized as 'temporarily not in use'. The remaining schemes i.e. the schemes excluding 'in use' and 'temporary not in use' may be classified as 'permanently not in use'.

8.2.18 **Item No. 11 (b): Number of years not in use:** The period in number of years since 'not in use' will be noted against this item. It will be noted for both `temporarily not in use' or `permanently not in use'. In case of schemes permanently not in use, such schemes cannot be out of use from or before 2017-18, since those schemes would be out of coverage of 7th MI census.

8.2.19 **Item No. 12: Reason code for Temporarily "not in use" Scheme (code-2 in item 11 (a)):** Reason should be given in code for the schemes which are temporarily "not in use". Codes are as under:

Non availability of adequate power/ fuel	- 1
Mechanical breakdown	–2
Less discharge of water	- 3
Non-availability of finance	-4
Lack of maintenance	-5
Any other reason	- 9

8.2.20 **Item No. 13: Reason code for permanently "not in use" Scheme (code-3 in item 11(a)):** Reason should be given in code for the schemes which are permanently "not in use". Codes are given below:

Due to salinity	– 1

Dried up	– 2
Destroyed beyond repair	– 3
Due to sea water intrusion	– 4
Due to industrial effluent	-5
Availability of Major/ Medium irrigation project	-6
Due to other reasons	- 9

8.2.21 **Item No 14: Method used for Water distribution:** Farmers are adopting different type of water distribution devices for irrigation. Sprinkler and drip irrigation methods have gained popularity among the farmers besides conventional methods of ground water channel. Appropriate code is to be indicated for the water distribution devices being used by the farmers.

Open Water Channel (lined/ pucca)	- 1
Open Water Channel (unlined/ Kutcha)	- 2
Under Ground pipe	- 3
Surface Pipe	-4
Drip	- 5
Sprinkler	- 6
Others	- 9

8.2.22 **Item No 15: Types of Lifting Device:** The type of devices used for lifting water from the source is to be indicated here by appropriate code. These codes are:

Submersible Pump	- 1
Centrifugal Pump	- 2
Turbine/ Jet Pump	– 3,
Manual/ animal	– 4
Others	– 9

8.2.23 **Item No 16: Source of Energy:** The source of energy used for operating lifting devices for lifting water from the source is to be indicated by appropriate code:

Electric	- 1,
Diesel	– 2,
Wind Mill	– 3,
Solar	– 4,

Others – 9.

8.2.24 **Item No17: Horse Power of Lifting devices (ignore, if lifting device is manual/animal):** Horse Power of the lifting device used may be reported. In case of manual/ animal driven, this item will be crossed (X).

8.2.25 **Item No. 18. Number of days pump operated (ignore, if lifting device is manual/animal):** The information is to be given for each season separately as per actual number of days of operation as informed by the farmer.

8.2.26 **Item No. 19. Average Hours of pumping per day:** These are to be given for each season separately as per actual average number of hours operated as informed by the farmer.

8.2.27 **Item No. 20(a): whether the scheme is located in the command of Major/ Medium Irrigation Schemes like Canal etc**: Some of the minor irrigation schemes may be located in the command of major/ medium irrigation schemes for conjunctive use. Such schemes are also to be enumerated. The appropriate code depending upon their use may be noted in this item as:

Yes -1

No - 2

8.2.28 **Item 20(b): If the scheme is in command area i.e. code 1 in item 20(a**): (i) name of the MMI project need to be recorded against this item. (ii) Normally, it is expected that there should be less number of MI scheme in the command area of major/ medium schemes as the water may be available for irrigation from Medium or Major Scheme. Despite that if any MI scheme exists in the command area, the reason for the same may be reported. The codes are:

Water not available up to field from major/ medium scheme-1,

Water available but not adequate for irrigation-2,

Water available but not usable for irrigation-3,

other reasons-9.

The name of command area may be reported in item 20b(i) and the reason code for scheme in the command area may be reported in item 20(b)(ii).

8.2.29 **Item 20(c): Whether the scheme is meant only for recharge of Ground water Yes-1, No-2:** There may be schemes which are not used for irrigation and merely for augmentation i.e. the scheme is meant only for recharge of Ground water. The same may be ensured when tube well or dug-well is constructed mainly to remove water only. In such cases, code 1 can be given and item 21 to 31 should be left blank. This type of cases may be very few. Most of cases would be scheme meant for irrigation i.e. having code 2 in item 20 (c).

8.2.30 **Item No.21: Culturable Command Area (CCA) (in Ha.):** In this column, the area proposed to be irrigated by the scheme during reference period should be indicated in hectare. It is generally the measurement of the field proposed to be irrigated by the scheme at the time of installation. In case the scheme is very old and the old Culturable command area is not feasible, due to change in land use etc., the current maximum Culturable command area of the scheme will be noted. If the CCA is spread over to another village also, the whole CCA for the scheme may be entered for the scheme in the village where it is located.

8.2.31 **Item No 22 to Item No 26: Season wise Irrigation Potential Created (IPC**): It is intended to find out the gross irrigation potential created from the scheme. It will indicate the area under Kharif, Rabi, perennial crops and other season proposed to be irrigated. The total of item 22 to 25 is to be noted in item 26. The figures under item 22, 23 & 25 should be season wise area proposed to be irrigated by the scheme. The figure under item 24 is for perennial crops. If the scheme has been improved upon by major addition in machinery or water distribution devices added, then revised potential is to be indicated. Item 26 will indicate the gross irrigation potential created. Irrigation potential created will be recorded in Ha up to two places of decimals.

8.2.32 **Item No 27 to Item No 31: Season wise actual area irrigated during 2023-24 (IPU):** In these columns, the area actually irrigated under kharif, rabi, perennial crops and for other season during the year 2023-24 shall be reported. Item 31 will indicate the gross irrigation potential utilized. Figure in each item from 27 to 31 would normally be less than or equal to the figure in item 22 to 26. Irrigation potential utilised will be recorded in Ha up to two places of decimals.

There may be some minor irrigation schemes which are located in the command area

of major/ medium irrigation projects and serve the purpose of supplementary irrigation. For example a Dug well/ Tube well in the command area of Major or Medium Scheme. It will be decided on the basis of actual availability of water from the Major/ Medium Irrigation project in to the fields under the coverage of the MI scheme concerned. In order to assess the extent of such supplementary irrigation, data is to be recorded under item 27 to 31.

For recording the potential utilized through the scheme which are situated in command area of Major/medium irrigation project, gross irrigated area will be divided in proportion to number of times MI scheme is used to irrigate the field. For example, if the field is irrigated two times by M.I. scheme and three times by major/ medium scheme, then irrigation potential utilized by M.I. scheme will be 2/5 times of the field area.

8.2.33 **Item No 32(i): Whether the scheme is underutilized. (Only for In-use Schemes):** For in-use schemes, it has to be ascertained whether it is under-utilized and if Yes, code 1 is to be given otherwise code 2 is to be given. Scheme shall be considered underutilized if IPU is significantly less than IPC.

If a MI Scheme is in the Command Area of Major/ Medium Scheme and IPU of the Scheme is less than IPC, even then it may not be underutilized as it is providing the necessary supplementary irrigation. It is clarified that for the schemes outside the command area, schemes shall be considered underutilized if the IPU in item 31 is significantly less than IPC in item 26 and scheme situated outside command area i.e code 1 in item 20(a).For schemes within the Command Area, ratio of IPU to IPC will not be the actual deciding factor for underutilization of the scheme. Enumerator has to decide on the actual situation of the scheme in the field. Similarly, for the schemes meant only for recharge of ground water, enumerator has to decide whether scheme is underutilized or not on the basis of actual situation of the scheme in the field, since, IPC and IPU are not relevant in these types of schemes.

8.2.34 **Item No. 32(ii): If yes i.e., code 1 in item 32(i):** If the scheme is underutilized, reason for the underutilization of scheme is to be recorded in terms of codes. The codes are:

Non availability of adequate power/ fuel	- 1
Mechanical break-down	- 2

Less discharge of water - 3

Non availability of Finance - 4

Lack of Maintenance - 5

Any other reason - 9

8.2.35 **Item No. 33: Whether the MI Scheme is used for 'Drinking Water' Purpose:** If the MI scheme is used for 'drinking water' as observed by the field investigator/enumerator in consultation with knowledgeable people of the village, then 'YES' should be selected; otherwise, 'no' should be selected.

8.2.36 **Item No. 34: Whether the scheme was captured in previous Census:** If the scheme was listed in the pre-populated data in the beginning, then ‘Yes’ should be recorded; otherwise ‘no’ should be selected. Even if the information is not pre-populated, the enumerator must inquire and determine whether the item was covered or not. If it was covered, then ‘Yes’ shall be recorded.

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CHAPTER NINE:

GENERAL INSTRUCTIONS FOR FILLING VILLAGE SCHEDULE

(7th MINOR IRRIGATION CENSUS & 2nd CENSUS OF WATER BODIES)

9.0 VILLAGE SCHEDULE

This is to be filled up for each village in the district. Some **general information about the village is to be written**. The items are self-explanatory.

9.1 IDENTIFICATION PARTICULARS

The name of the State/ District/ Block (Tehsil)/ Village will be recorded with respective codes of Local Government Directory (LGD). Date of enumeration has to be auto- recorded in the format dd/mm/yy.

9.2 SPECIFIC INFORMATION

9.2.1 **Item no. 1:** If the village is classified as tribal village depending upon the proportion of tribal population living in the village, as per definition in the state, it will be treated as tribal and code 1 will be given, otherwise code 2 will be given.

9.2.2 **Item no. 2**:(a) If the village is covered by any major or medium irrigation scheme, code 1 will be entered otherwise code 2 will be given.(b) If answer is yes in item 2 (a), the name(s) of the major or medium schemes providing irrigation in the village area will be noted.

9.2.3 **Item no. 3: Geographical area:** Total Geographical area of the village including populated, agricultural and non-agricultural area will be noted as per village records in Ha in whole number.

9.2.4 **Item no. 4: Cultivable Area:** Total area of the village which is fit for cultivation in any season will be included in cultivable area in Ha in whole number. It should be less than or at most equal to the geographical area of the village as recorded in item no-3. In case, there is significant decrease in cultivable area, reasons may be given in remarks.

9.2.5 **Item no. 5: Net Sown Area:** Total area in the village which has been cultivated and any crop is sown in any one season of the year will be taken as net sown area in Ha in

full number and the same area will not be counted again if it is sown for more than one crop in different seasons. Any area will be counted only once. Net sown area should be less than or equal to cultivable area.

9.2.6 **Item no. 6: Gross area irrigated (By all sources):** Gross area irrigated will be noted season-wise for different crop seasons by all ground water and surface water schemes. It will be noted in Ha. Any area which is sown and irrigated with a crop in a particular season will be counted for that season and similar procedure will be followed for all crops and all seasons counting the area irrigated under more than one crop during the same year as many times as the number of crops grown and irrigated. Gross area irrigated in any season should not be more than net area sown**.**

9.2.7 **Item no. 7: Net Irrigated Area:** Net Irrigated Area will be noted as area cultivated and irrigated at least once in the reference year in any one season or for any one crop. It will be noted in Ha. Any area cultivated and irrigated for more than one crop will be recorded only once.

9.2.8 **Item no. 8: Average Ground water level (In Meters):** Ground water level in the village for Pre Monsoon and Post Monsoon will separately be recorded in meters for the reference year 2023-24. Average ground water level in the village should be taken as observed prior to on-set of monsoon before the agricultural year 2023-24 and after the monsoon.

9.2.9 **Item no. 9: Whether Water Users association (WUA) exists in the village:** If there is any association of cultivators for taking decisions on matters related to utilization of water either for major/ medium irrigation projects or for public sector minor irrigation scheme(s) in the village, it will be considered in this item and answer will be given as code 1 if yes, and code 2 if no. Efforts should be made to get the information. However, if the information is not available despite best efforts, then code 3 i.e. not known may be recorded.

9.2.10 **Item no. 10: Summary of Number of water bodies as per all water body schedules filled in the village:** This information will be auto populated based on the waterbody schedules filled in the village.

9.2.11 **Item no. 11: Summary of M.I. Schemes in the village:** This information will be auto populated based on the detailed schedules of each Minor Irrigation Scheme in the village.

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CHAPTER TEN:

FREQUENTLY ASKED QUESTIONS

10.0 FREQUENTLY ASKED QUESTIONS

Some of the frequently asked questions regarding 7th MI Census and 2nd Census of Water Bodies are given as follows:

10.1 VILLAGE SCHEDULE

Q1. Can gross irrigated area (by all sources) be larger than geographical area of the village?

Ans. Yes, gross irrigated area (by all sources) can be larger than geographical area of the village as it is the total of season-wise irrigated area (by all sources)

Q2. **Some of the States are getting rainfall from two monsoons. Which is relevant monsoon season for pre/post monsoon ground water level?**

Ans. Of the two seasons, the season with major rainfall is to be treated as Monsoon season for pre-monsoon and post-monsoon ground water level.

Q3. How the information of number of water bodies to be reported in the Revenue village which is having rural and urban area both?

Ans. The water body in the rural area of the revenue village is to be reported in the Village Schedule and the water body in the urban area of the revenue village is to be reported in the Urban Schedule. Duplication of counting of waterbodies should be avoided in village/urban schedule of a revenue village. If the revenue village is having urban area only, the information relating to Water Bodies will be compiled only in urban schedule corresponding to that town.

Q4. How the total number of wards information to be given?

Ans. This is to be filled up for a town as per the Urban Directory. Separate urban Schedule is to be filled up for each town.

Q5. What is the difference between Culturable Command Area and Net Irrigated Area?

Ans: The culturable command area (CCA) for a particular irrigation scheme is determined by subtracting the unculturable area from the gross command area (GCA). The GCA is

the total area that can be economically irrigated from an irrigation scheme, while the unculturable area includes areas like habitats, roads, drainage, and other non-agricultural areas.

Therefore, the formula to calculate CCA is:

CCA = GCA - Unculturable area

For example, if a minor canal has a gross command area (GCA) of 450 hectares, encompassing a habitat and road covering 160 hectares, then its culturable command area (CCA) will be:

CCA = 450 hectares - 160 hectares = 290 hectares

Whereas, Net irrigated area is the area cultivated and irrigated at least once in the reference year in any one season or for any one crop.

10.2 GROUND WATER SCHEDULE

Q1. The depth of Tube well is exactly 35 meters. Whether it would count in Shallow tube well or Medium Tube Well?

Ans. Up to 35 Meter Depth is to be taken as Shallow tube well. Depth more than 35 meter and up to 70 meters is to be taken as Medium Tubewell. Above 70 meters' depth shall be treated as Deep Tubewell.

Q2. In some Tubewells, the bore is having two pipes of different diameters. Diameter of which pipe is to be taken.

Ans. The diameter of the lower pipe of the bore is to be taken in this case.

Q3. What is to be recorded if cost of construction is Not available.

Ans. Estimated value of the cost of Construction is to be reported in this case.

Q4. If a tractor is used as lifting device for lifting water from a tube well, will the full cost of tractor be reported in cost of machinery?

Ans. It would not be appropriate to give cost of tractor as cost of machinery, as it will give abnormally high value for cost of machinery. However, the estimated cost of the lifting

device, which would have been appropriate for that tubewell had the tractor not been used as lifting device, may be given.

Q5. A farmer owns more than one MI scheme and is using one portable lifting device in more than one scheme. How the cost of machinery will be reported?

Ans. The cost of portable lifting device will be equally divided and reported in all the schemes.

Q6. If a farmer owns a MI scheme but doesn't own a lifting device and is paying rent for portable lifting device, whether this expense is to be shown as Machinery Cost?

Ans. No. The expense incurred on rent paid in this case is to be recorded in the cost of maintenance.

Q7. If any scheme which was permanently not in use in 6th MI Census, and is found to be "in use" during survey, whether it will be covered?

Ans. Yes. If a scheme is found in use during survey, it will be covered.

Q8. Whether average pumping hours can be given in decimal

Ans. The average pumping hours is to be recorded in whole numbers. If it is in decimal, it is to be rounded off.

Q9. What is to be recorded in name of command area of a MMI project?

Ans. If a MI scheme is located in the command area of a Major/Medium Scheme, the name of that Major/Medium Scheme is to be recorded.

Q10. What code is to be given if a MI Scheme is underutilized due to its location in the command area of a Major/Medium Scheme.

Ans. "Any other reason" is to be recorded in such cases.

Q11. If a ground water scheme is used in other sectors also besides irrigation, should it be included in the census?

Ans. If the major portion of output from the scheme is used in irrigation sector, it should be included in the census.

Q12. How to identify if the scheme is underutilized?

Ans. If there is significant difference in IPC and IPU of scheme, then it is under-utilized.

10.3 SURFACE WATER SCHEDULE

Q1. If a Water Body is used for irrigation also, whether both schedules i.e. one for Water Body and another for MI Scheme are to be canvassed?

Ans. Yes. If a Water Body is used for irrigation also, it will be treated as a MI scheme and one MI schedule of surface water along with one water body schedule will be canvassed. If there are more than one MI schemes on the water body, MI schedules for all the MI schemes on that water body will be canvassed along with one water body schedule.

Q2. Unauthorized access by fixing motors for lifting water from surface water schemes for irrigation purpose. Whether it can be considered as a scheme or not.

Ans. If the scheme is used for irrigation purpose, then it needs to be enumerated.

10.4 WATER BODIES SCHEDULE

Q1: Whether waterbodies in urban area needs to be enumerated?

Ans. 2nd Census of Waterbodies will be conducted both in rural and urban areas. Summary of waterbodies will be auto generated in the Village Schedule/Urban Schedule based on the information collected in the waterbody schedule.

Q2. If a water body is spread in more than one village, whether the information in various items of the schedule is to be reported for the area of the waterbody in the village only?

Ans. If a water body is spread in more than one village, even then only one schedule for water body has to be filled and the information in various items of the schedule is to be reported for the whole water body.

Q3. Whether bowli will be treated as a water Body?

Ans. If the bowli is receiving ground water (through dug well or bore-well), it will be treated as a ground water scheme and not as a water body.

Q4. If the base of a Water Body is Pucca, whether it is a Water Body?

Ans. The base of a Waterbody (whether pucca or kutcha) is not the deciding factor for classifying a structure as water body. It has to be decided on the basis of the definition of the water body in the instruction manual of Census of water bodies.

Q5. If original cost of Water Body is not available, how to record it?

Ans. This information is to be collected for manmade Water Bodies only. If record is not available, estimated cost can be given.

Q6. How the name & code of basin & sub-basin is to be recorded.

Ans. List of basin and sub-basin along with their codes have been incorporated in the mobile application and States/UTs will be able to select respective basins/sub basins during data collection.

Q7. Which area will be taken as water spread area of the water body?

Ans. Surface area covered of the water body will be taken as water spread area of the water body. In the case of large water bodies (like Reservoirs), the water spread area may be available in the official records which need to be taken. Otherwise, it has to be recorded as actual area covered at the time of survey.

Q8. Whether schedule is to be filled for the water body which is fully encroached.

Ans. If, during the survey work, the enumerator comes to know (through the records or otherwise) that earlier there was a water body which has now been fully encroached and doesn't exist now, even then, a water body schedule will be canvassed and entry in the relevant items will be recorded to know the extent of encroachment of water bodies in the country.

Q9. If the storage capacity of water body is not available, what should be recorded?

Ans. The estimated figure may be written against this item in respect of natural water body. If it is a man-made publicly owned water body, storage capacity may be available in administrative records.

Q10. How to map latitude and longitude in case of reservoir which is falling in 02 states.

Ans. The State in which maximum portion of reservoir is falling, the schedule should be filled for that State only.

Q11. How the encroachment figures of water bodies be recorded?

Ans. Encroachment on a water body refers to unauthorized entry into the defined boundary of the water body for various human activities like construction, agriculture etc. If it is observed that the area of water body has been encroached then it has to be ascertained whether the encroachment area can be assessed approximately (percentage). If yes, then approximate percentage of area encroached may be recorded in two digits without decimal. To assess the area of encroachment, for water body owned by public authority, the original water spread area can be enquired from the authority under which the Water Body is functioning.

Q12. Whether a water body located in Forest area is to be included in the census?

Ans. Yes, all the water bodies are to be covered in the census of water bodies.

Q13. How to conduct water body census in Forest area?

Ans. Regarding coverage of Forest area, a member may be included from the State Forest Department in the State Level Steering Committee. The queries related to covering of water body in Forest Area will be addressed by the said committee.

Q14. How do we classify snow check dams and artificial glaciers (bounded) under waterbodies?

Ans. Snow check dams and artificial glaciers (bounded) will be counted under type - 'others' of water body.

Q15: Should wetlands be treated as water bodies?

Ans: According to the Ramsar Convention, wetlands are defined as "areas of marsh, fen, peatland, or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish, or salt, including areas of marine water the depth of which at low tide does not exceed six meters"

The definition of water body in manual specifically mentions "all natural or man-made units bounded on all sides with some or no masonry work used for storing water for irrigation or other purposes." Wetlands, on the other hand, are natural or artificial ecosystems characterized by saturated or flooded conditions, and they may not necessarily be bounded by masonry work or used for storing water for irrigation or other purposes.

Some wetlands which may fit this definition are as follows:

Certain marshes, swamps, and lakes that have bounded storage of water and are not free flowing. Examples: Dal Lake – A natural wetland but also serves as a water body used for irrigation and drinking.

Some wetlands which shall not fit this definition are as follows:

- Wetlands connected to rivers, streams that do not have bounded water storage.
- Wetlands that fill up during monsoons or seasonal flooding but do not permanently store water.
- Tidal wetlands
- Marshy or peatland wetlands – Areas with water-logged soil but no clear standing water storage

Examples: Sundarbans Mangrove Forest – A wetland, but not a water body due to its free-flowing nature. Chilka Lake–excluded from the water body category as it is a lagoon separated from the Bay of Bengal by a narrow channel and sandbar.

Q16: Should the wells be treated as water bodies?

Ans: Wells will not be treated as water bodies irrespective of use. Wells that are primarily used for irrigation purpose will be counted under Ground Water Schemes.

Q17: Should the fishery dam (Bheri) which are mostly found in coastal area be considered as water body?

Ans: Bheri is a low land surrounded by shallow earthen embankment where seasonally saline water enters from nearby rivers or stream. Mostly they are used in pisciculture. Since this storage of water is need based and also considering the fact that water is not present throughout in these structures, these types of structures shall not be considered as water bodies.

Q18: If the water body on which surface water scheme (say surface flow scheme) is installed is very far away from the point where enumerator is standing on that surface water scheme, how the water body schedule can be filled first?

Ans: In such cases, Surface water schedules can be filled and saved without submitting it. While moving in serpentine way and covering other schemes on the way, the enumerator shall reach at the water body where that surface water scheme is installed.

Enumerator can fill the water body schedule and submit it. Thereafter he can open the saved schedule of concerned surface water scheme, fill the relevant details of water body over which it is installed and then submit the surface water schedule.

10.5 GENERAL QUERIES

Q1. Whether Urban Villages need to be captured in the 7th MI Census?

Ans. As earlier, the MI census will be limited to only rural areas of the country. Village/Ground water /Surface water schedules will not be canvassed in villages which have been urbanized.

Q2. What is to be done if the LGD code of a village/ward is not found?

Ans. The frame of census has been prepared with the LGD codes available as on 12.02.2025 on LG directory. If any activity like splitting of village, urbanization etc. has happened after 12.02.2025, nothing shall be done and the status of village as on 12.02.2025 shall remain the same.

Missing LGD code may happen in the following scenarios:

Splitting of village: If village 'A' is bifurcated into village 'A1' and village 'A2' post 12.02.2025, then these bifurcated villages shall not be available in the mobile app. Schedules shall be filled by selecting village 'A' only.

Urbanization: It may happen that village 'A' has been converted to urban area post 12.02.2025. In this case, it shall be considered as rural area only and both MI and water body census shall be conducted in these areas.

Q3. What is to be done if the scheme was not listed in the pre-populated data based on 6th MI Census in the mobile application?

Ans. The enumerator may add a new scheme if the specific scheme was not listed in the pre-populated data.

Q4. What is to be done if the scheme was incorrectly listed in the pre-populated data based on 6th MI Census in the mobile application?

Ans. If a scheme was incorrectly listed in the pre-populated data, the enumerator can select the same scheme and modify its features to ensure accuracy.

Q5. What is the reference year of the census?

Ans. The reference year of the census is 2023-24, i.e. the data on items of schedule should pertain to 2023-24 unless stated otherwise.

Q6: The command area of a major irrigation project may contain multiple number of irrigation schemes. Capturing data on those schemes may be a duplication or not?

Ans. All minor irrigation schemes in the command area of a MMI project may also be enumerated.

Q7. Who can access the mobile and web application?

Ans. The mobile application shall be used by enumerator for filling the schedules of census. The web application shall be used by Block level and above officers for data scrutiny and progress monitoring.

Q8: Should unregistered WUAs should be counted?

Ans: If any water user association is formed, both registered and unregistered will be considered as water user association formed and code 1 will be recorded.

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ANNEXURES

Annexure – I

STATE-WISE NUMBER OF THE DISTRICT/SUB-DISTRICT/BLOCK/VILLAGE

S.No.	State/UT	No. of Districts	No. of Sub-districts	No. of Blocks	No. of Villages
1	Andaman and Nicobar Islands	3	9	9	559
2	Andhra Pradesh	26	686	669	17951
3	Arunachal Pradesh	27	209	129	5485
4	Assam	35	158	240	28543
5	Bihar	38	534	535	45693
6	Chhattisgarh	33	251	147	20368
7	Delhi	11	28	1	222
8	Goa	2	12	13	429
9	Gujarat	33	280	251	19041
10	Haryana	22	143	144	7089
11	Himachal Pradesh	12	184	92	21253
12	Jammu and Kashmir	20	208	286	6857
13	Jharkhand	24	263	265	32737
14	Karnataka	31	240	237	30757
15	Kerala	14	78	153	1666
16	Ladakh	2	15	32	248
17	Lakshadweep	1	10	11	27
18	Madhya Pradesh	55	438	314	56646
19	Maharashtra	35	358	352	44738
20	Manipur	16	65	71	3856
21	Meghalaya	12	55	56	7125
22	Mizoram	11	28	28	877
23	Nagaland	16	120	75	1663
24	Odisha	30	471	315	52245
25	Puducherry	2	8	4	129
26	Punjab	23	97	155	13003
27	Rajasthan	49	425	363	47995
28	Sikkim	6	18	35	483
29	Tamil Nadu	38	316	389	18696
30	Telangana	33	590	582	11226
31	The Dadra and Nagar Haveli and Daman and Diu	3	3	3	101
32	Tripura	8	23	59	898
33	Uttar Pradesh	75	350	827	110274
34	Uttarakhand	13	129	96	17334
35	West Bengal	22	345	346	41006
	Total	**781**	**7147**	**7284**	**667220**

Note: Master frame consisting of list of villages and wards downloaded from LG Directory as on 12.02.2025.

STATE-WISE NUMBER OF THE DISTRICT/SUB-DISTRICT/TOWN/WARDS

S.No.	State/UT	No. of Districts	No. of Towns	No. of Wards
1	Andaman and Nicobar Islands	1	1	24
2	Andhra Pradesh	25	124	3923
3	Arunachal Pradesh	14	19	59
4	Assam	31	95	910
5	Bihar	37	137	3322
6	Chandigarh	1	1	35
7	Chhattisgarh	33	169	3234
8	Delhi	4	4	280
9	Goa	2	14	226
10	Gujarat	32	165	1374
11	Haryana	22	87	1686
12	Himachal Pradesh	10	60	553
13	Jammu and Kashmir	20	78	1124
14	Jharkhand	24	47	1063
15	Karnataka	31	300	7128
16	Kerala	14	93	3529
17	Ladakh	2	2	26
18	Madhya Pradesh	55	413	7682
19	Maharashtra	35	409	7060
20	Manipur	6	27	306
21	Meghalaya	10	11	164
22	Mizoram	10	23	242
23	Nagaland	14	33	371
24	Odisha	30	113	2092
25	Puducherry	4	5	116
26	Punjab	23	163	3163
27	Rajasthan	49	240	8133
28	Sikkim	5	7	51
29	Tamil Nadu	38	649	12729
30	Telangana	32	141	3575
31	The Dadra and Nagar Haveli and Daman and Diu	3	3	43
32	Tripura	8	20	318
33	Uttar Pradesh	75	766	12845
34	Uttarakhand	13	91	1134
35	West Bengal	21	126	2938
	Total	**734**	**4636**	**91458**

Note: Master frame consisting of list of villages and wards downloaded from LG Directory as on 12.02.2025.

Annexure - II

Guidelines adopted for updating Master Frame

The censuses under 'Irrigation Census' scheme shall be conducted in all States/UTS except Lakshadweep. The censuses shall use Local Government Directory (LGD) codes which have been developed by Ministry of Panchayati Raj as part of Panchayat Enterprise Suite (PES) under e-Panchayat Mission Mode project (MMP). The primary objective of the Local Government Directory (LGD) is to build a Standard location directory by providing an online platform to the States/UTs to maintain the up-to-date list of respective administrative units (Districts, Sub-Districts, Villages, Blocks, Local Governance bodies along with their corresponding Rural/ Urban wards) in collaboration with Office of the Registrar General of India (ORGI), Ministry of Home Affairs (MHA). It aims at establishing seamless exchange of data across all e-Governance applications and thus ensure transparency in the system.

2. Till previous round of censuses, the frame of census was taken from respective State/UTs, however, this time the censuses are done in complete digital way wherein the State/District/development Block/ village codes based on LGD codes shall be automatically filled up in the mobile application of the enumerator. For this, the LGD codes as on 12.02.2025 are taken as the frame of censuses.

3. Need for updating Master Frame

Updating the Master Frame is essential for finalizing the frame which contains villages and wards where census will be conducted. Updation needs to be done on the actual position of villages/wards on the ground with respective authorities, if required.

4. While examining the LGD codes, some ambiguities were observed. In order to address the issues, States/UTs were requested to do the following:

i. The complete list of LGD coded State/District/Development Block/Sub District/ Village (as available with M/o Panchayati Raj) where the census shall be conducted in respect of each State were shared. States were requested to check the list and revert in case there is any missing village in this list.

ii. There are certain villages which are having LGD codes but the corresponding Block names and codes are Null. It may be because these villages are not mapped with any Block by the State. At the central level, this issue is being taken up with M/o Panchayati

Raj. Meanwhile States were requested to contact the nodal officers of PRI in the State to map such villages with appropriate Block.

iii. There are certain villages which are having same name but different LGD codes within a Block. States were advised to take extra caution while assigning enumerators in such villages. In order to ensure the boundary of the village, map of the village may be obtained from Block officials/or "Gram manchitra" application (https://grammanchitra.gov.in), where village/ward may be drilled down to get the required information.

5. Based on the queries received from States/UTs, the different scenarios and the possible solution in each of these scenarios are as follows. It may be noted that the following solution are applicable if the scenarios mentioned below have happened before 12.02.2025 (the date on which LGD codes are taken from LG Directory, MoPR). If any activity like splitting of village, urbanization etc. has happened after 12.02.2025, nothing shall be done and the status of village as on 12.02.2025 shall remain the same.

6. The MI census shall be done only in rural areas. However, water body census shall be done both in rural and urban areas. Master frame containing the list of villages and wards have been circulated to all states for vetting. Vetting needs to be done on the actual position of villages/wards on the ground with respective authorities, if required.

Case 1: Village is missing in the LGD directory on account of splitting of village

It may happen that village 1 is broken into village A and Village B due to which village A and village B are not shown in the LGD codes. In such cases, States/UTs are requested to inform us the name and LGD codes of Development Block/Sub District and District in which such villages fall. These villages will be assigning pseudo codes and incorporated in the frame from the backend.

Case 2: Village is missing in the LGD directory on account of urbanization

It may happen that village 1 has been converted to urban area before 12.02.2025 and listed in the rural dataset of a State/UT. In such cases, States/UTs have to provide the following:

i. Govt. notification by which village has been converted to urban category (If govt notification is not available, then State Nodal Officer may certify those villages after consultation with PRI department of State/UT)

ii. States/UTs may check the urban data and if the village is not covered under urban wards, then corresponding ward name, town name and district name with LGD codes need to be provided.

Case 3: Duplicate village in same sub district

It may happen that in a sub-district, there are two villages with same name but different LGD codes, in this case States are advised to take extra caution while conducting census (assigning enumerators) in such villages. Although the LGD codes are unique in nature, however if any State finds a village with same name and same LGD code in a sub district/ block, the details of such villages along with the name and code of sub district/ block/district/State where it falls should be intimated to this Ministry.

Case 4: In correct classification of villages under sub districts in LG Directory

This may happen in situations where a village may be misclassified under another sub-district/development block. Also, there may be another scenario where a village has broken in two villages and one part of village is in one block whereas other broken part of village is in another block. In such cases, States are requested to inform the name and code of such villages along with the name and code of sub district/ block/district/State where it should fall.

Case 5: Villages merged with another village which causes duplication in LGD code

If village A is merged into village B, then the schedules are to be canvassed only for village B. In this case, village A should not exist in the master frame. If any State/UT experiences such issues, they are requested to inform the name and code of such villages along with name and code of sub district/ block/district/State where it falls so that these villages may be deleted from the directory. The details of those villages need to be verified after consultation with PRI Department in States/UTs.

Case 6: A village was existing before 12.02.2025 but LGD code was not available and it was missing in the master frame. During the census process, the State/UT identified the missing village, and by the time the LGD code became available.

In such cases, the said missing villages with their LGD codes shall be made available in the mobile application for conducting census, if State/UT has provided the LGD codes provided by M/o Panchayati Raj.

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2nd CENSUS OF WATER BODIES

WATER BODY SCHEDULE **Code: 01**

REFERENCE YEAR: 2023-24 **(AGRICULTURAL YEAR)**

Rural-1/Urban-2 ☐

I Identification Particulars (Standard Codes to be used)

(a)State_____ Code ☐☐ (b) District _____ Code ☐☐☐

For Rural

(c) Block/Tehsil _____ Code ☐☐☐ (d) Villages name_____ Code ☐☐☐

For Urban:

(e) Town/Municipality _____ Code ☐☐☐ (f) Ward no ☐☐☐

(g) Sl.number of water body within village/Town ☐☐☐

(h) Date of Enumeration (DD/MM/YY) ☐☐-☐☐-☐☐

(i) Whether this Waterbody is present in SAC database : Yes-1, No-2 **Code:** ☐

Unique Identification key for Water body (If urban give code for town and ward)

R/U	State	Distt.	Tehsil/Town/block	Village/Ward	Serial No.- within village/town

II Specific Information:

1.1 (a) Name of Water body (if any)/ with specific permanent land marks

_____

1.1(b) Name of Basin & Sub-basin in which water body is situated:_____ Basin code ☐☐

_____ Sub basin code ☐☐

1.2 (a) . Type of Water Body:Ponds-1, Tank-2, Lakes-3, Reservoirs-4 **Code:** ☐
Water conservation schemes/percolation tanks/check-dams-5, Others-9

1.2(b) If code is "Others" in item 1.2(a) the nature of storage : _____

1.3. Khasra number/plot no/survey no in which the water body is located :_____

	Degree	Minute	Second
2. Latitude (In degree, minutes, seconds)			
3. Longitude (In degree, minutes, seconds)			

4. Whether located in DPAP-1 /Tribal-2/DDP-3/ **Code:** ☐
Flood prone-4, Naxal affected area 5, Other -9

5. Ownership: State WRD/State Irrigation-1,Co-ooperative-2,Panchayat-3,Muncipal authority-4, Other Govt. Agency-5,
Individual-6, Group of Individuals -7, Other private body -9 **Code:** ☐

6(1) Whether Water body is in use: Yes-1, No-2 **Code:** ☐

6(2) If in use i.e. code 1 in item 6(1) above, uses: **Code:** ☐
Irrigation-1, Industrial-2, Pisciculture-3, Domestic/Drinking-4, Recreation-5, Religious -6, **Code:** ☐
Ground Water Recharge-7, Natural Habitat for birds/Animals-8 Other-9: **Code:** ☐
(up to three codes in order of preference)

6(3) If water body is "in use" for Irrigation i.e. code 1 in item 6(2) :

CCA of water body Ha.

IPC of water body Ha.

6(4) If not in use i.e. code 2 in item 6 (1) above, state the Reasons: Dried up-1,Construction-2, Siltation-3, Destroyed beyond repair-4,Salinity-5, Due to industrial effluents-6, Others-9 **Code:**

7(1) Nature of waterbody: Natural-1, Man made (Dam, weir constructed pond etc.)-2 **Code:**

7(2) If code 2 i.e. man made in item 7(1) type : Earthen-1,Concrete-2,Masonary-3,others-9 **Code:**

8. Year of Construction and original cost (only for man made): **Year**

Original Cost Rs.

9. Year of renovation / repair (for all water bodies) **Year**

Cost of last repair **Rs.**

10. Whether, Water body is under repair/renovation/restoration: yes-1, No-2

10(1) If yes: Scheme under which revival is being done: _____

10(2) Year of inclusion under the scheme:

10(3) Targeted year of completion:

10(4) Estimated cost **Rs.**

10(5) Target of potential revival Ha.

10(6) Irrigation potential revived Ha.

11(1). Whether the water Body is associated with central scheme ?
Yes-1,No-2 Code:

11(2) If Yes, Name the associted Central Scheme
Jal Jeevan Mission-1, Pradhan Mantri Matsya Sampada Yojana- 2, Others-3 **Code:**

12(1). Does Water Body contains water throughout the year? (Yes-1, No- 2) **Code:**

12(2). If No, then, the number of months Water Body Contains the Water?
More than 9 months-1, 6-9 months-2, less than 6 months-3 **Code:**

13. Water spread area of the water body during reference year (in Ha) **Ha.**

13(1). Water spread area of the water body during current year (in Ha) **Ha.**

13(2). Minimum Water spread area (in Ha) **Ha.**

13(3). Maximum Water spread area (in Ha) **Ha.**

14 Max. depth of water body when fully filled up: (In Meters)

15.Storage Capacity of water body in thousand Cu.meter Original
Present

16. **Filled up Storage (During 2023-24)** Full-1, up to 3/4 -2, up to 1/2 -3, up to 1/4 -4, Nil/ negligible filled -5. **Code:**

17 Whether silt is present in the water body which is reducing its capacity? Yes-1, No-2 **Code:**

18.Status of filling up of storage space (based on around 50% filling up of storage during last 5 year) **Code:** ☐

Filled up every year- 1, Usually filled up -2, Rarely filled up -3, Never filled up -4

19(1) Number of City/Town/Villages benefited.

Town/Cities ☐☐☐

Villages ☐☐☐

19(2) Number of people directly benefited by Water body: ☐☐☐☐☐☐ No.

20 (1) Whether Water Users Association (WUA) is formed(Except Individual ownership):

Yes-1 , No-2, Not known-3 **Code:** ☐

20 (2) If Yes i.e. code 1 in item 20(1): **Code:** ☐

(a) **Extent of area covered by WUA**: Full area covered-1, Partial area covered-2 ☐

(b) Number of Water Users Association(WUA) formed for this Water Body: ☐☐☐

21. Whether water body included in District Irrigation Plan(DIP)/State Irrigation Plan(SIP) Yes-1.No-2 **Code:** ☐

22 (1) Whether any area of Water Body is encroached: Yes-1, No-2: **Code:** ☐

22(2) If yes i.e. code 1 in item 22(1), can extent of encroachment be assessed : Yes-1, No-2 **Code:** ☐

22(3) If yes i.e. code 1 in item 22(2) : Approximate percentage of area encroached ☐☐ **%**

23. whether water body is standalone or connected

Standalone-1, Connected-2 Code: ☐

23(1) If Connected, Number of Connected Water Bodies ☐☐

24. Whether this Waterbody was captured in previous census: Yes-1, No-2 Code: ☐

Checked by:

Name
Designation of Supervisory officer
Mobile No.
Email:

Name of the Enumerator
Designation
Mobile No.
Email:

SEVENTH CENSUS OF MINOR IRRIGATION SCHEMES
REFERENCE YEAR 2023-24 (AGRICULTURAL YEAR)

SURFACE WATER SCHEMES **Code: 02**

I. IDENTIFICATION PARTICULARS

(a)State: _____ **Code :** **(b) District:** _____ **Code:**

(c)Block/Tehsil: _____ **Code:** **(d) Village:** _____ Code:

(e) Latitude _____ **Longitude**_____

(f) Date of Enumeration:(DD/MM/YY) - -

II. SPECIFIC INFORMATION:

1. Serial Number of scheme :

2. Type of Scheme **Code:**
Surface Flow Scheme – 1, Surface Lift Scheme - 2

3.1 If code 1 in item 2, Nature of Surface Flow Scheme: **Code:**
Reservoirs - 1, Tanks/Ponds -2, Other Storages -3, Permanent diversion - 4, Temporary diversion - 5 ,
Water conservation-cum-ground water recharge schemes /percolation tanks/check dams etc - 6, Spring Channel - 7, Others - 9

3.2, If code 2 in item 2, Nature of Surface Lift Scheme: **Code:**
On River - 1, On Stream - 2, On drain/canal - 3 , On Tanks/Ponds/Reservoirs/check dams - 4, Others - 9

4. Owner of the Scheme (Name in case of individual farmer)
Name _____ **Code:**
Govt. owned - 1, Co-operative owned - 2, Panchayat owned - 3, Owned by Group of farmers - 4,
Owned by individual farmer - 5, Others – 9

5. Khasra number /Plot No./Survey No. in which the scheme is located _____

6(a). Total Holding of owner (in case of individual owner only) . **Ha.**

(b) Social Status of Owner (in case of individual owner only) **Code:**
Scheduled caste -1 , Scheduled tribe – 2 , OBC- 3, Others 9

(c) Gender of Owner (in case of individual owner only)
Male-1, Female-2, Transgender-3 **Code:**

7. Year of Commissioning of the Scheme **Code :**
Upto 2018-19- 1, during 2019-20 - 2, during 2020-21 - 3, during 2021-22- 4
during 2022-23 - 5 , during 2023-24 - 6

8. (a) Cost of construction of the scheme **(Rs.)**

(b) Cost of machinery **(Rs.)**

(c) Cost of maintenance during (2023-24) **(Rs.)**

9.(a) Major source of finance (upto 2) (For individual owners only) **Code :**
Bank loan - 1, Government fund - 2, Own savings - 3, Money lender - 4, Others - 9

9(b) .If any subsidy/assistance provided by Govt. / PSU , amount for (For All Schemes)
(i) Construction of Scheme/ digging **(Rs.)**
(ii) Cost of machinery/ distribution device **(Rs.)**

10. Current Status of the Scheme

(a) In use - 1, Temporarily Not in Use - 2, Permanently Not in use - 3 **Code:** ☐

(b) If code 2 or 3 in item 10(a), No. of years not in use ☐

11 . If code 2 in item 10 (a) reason for Temporarily "not in use" **Code:** ☐

Non availability of adequate power/ fuel – 1 , Mechanical break down – 2 ,
Less discharge of water - 3 , Non Availability of finance-4, Storage not filled up fully - 5
Siltation of canal/storage - 6, Breakdown of channels - 7, Any other reason - 9

12 . If code 3 in item 10 (a), reason for Permanently "not in use" **Code:** ☐

Due to salinity - 1, Dried up - 2 , Destroyed beyond repair - 3,
Due to sea water intrusion - 4, Due to industrial effluents - 5, Availability of
Major / Medium Irrigation Project - 6, Due to sinking -7, Due to other reasons - 9

13. Method used for water distribution: **Code :** ☐

Open Water Channel (lined / pucca) – 1, Open Water Channel(unlined / kutcha) - 2
Under ground pipe – 3, Surface pipe - 4, Drip - 5 , Sprinkler - 6 , Others -9

14. Types of lifting device (Only for Surface lift Scheme) ☐

Submersible pump - 1 , Centrifugal Pump - 2, Turbine/Jet pump - 3, Manual/animal - 4, Others - 9

15. Source of energy :(Only for Surface lift scheme) **Code :** ☐

Electric - 1, Diesel - 2, Wind Mills - 3, Solar - 4, Others - 9

16. Horse Power of Lifting device ☐☐.☐ **HP**

(ignore if lifting device is manual/animal)

17. Number of days pump operated (ignore, if lifting device is manual/animal)

During Kharif season ☐☐☐ **Days**

During Rabi season ☐☐☐ **Days**

For Perennial crop ☐☐☐ **Days**

During other season ☐☐☐ **Days**

18. Average hours of pumping per day (ignore, if lifting device is manual/animal)

During Kharif season ☐☐ **Hrs**

During Rabi season ☐☐ **Hrs**

For Perennial crop ☐☐ **Hrs**

During Other season ☐☐ **Hrs**

19 (a) Whether the scheme is located in the command of
Major/ Medium Schemes like Canals etc. **Code :** ☐

Yes --- 1

No --- 2

19(b) If Scheme is in command area i.e. code 1 in item 19(a),

(i) Name of the MMI Project_____

(ii) reasons for Scheme in Command Area of the MMI Project: **Code :** ☐

Water not available up to field from major/medium scheme-1,Water available but not adequate for irrigation-2

Water available but not useable for irrigation-3, Other reasons-9

19 (c) Whether the scheme is meant only for recharge of Ground water Yes-1, No-2 **Code:** ☐

(If yes **Keep item 20 to item 30 blank)**

X

20. Culturable Command Area [ ][ ][ ][ ].[ ][ ][ ] **Ha.**

SEASON WISE IRRIGATION POTENTIAL CREATED (IPC)

21. Kharif [ ][ ][ ][ ].[ ][ ][ ] Ha.

22. Rabi [ ][ ][ ][ ].[ ][ ][ ] Ha.

23. Perennial [ ][ ][ ][ ].[ ][ ][ ] Ha.

24. Other [ ][ ][ ][ ].[ ][ ][ ] Ha.

25. Total [ ][ ][ ][ ].[ ][ ][ ] Ha.

Season wise actual area irrigated during 2023-24 (IPU)

26. Kharif [ ][ ][ ][ ].[ ][ ][ ] Ha.

27. Rabi [ ][ ][ ][ ].[ ][ ][ ] Ha.

28. Perennial [ ][ ][ ][ ].[ ][ ][ ] Ha.

29. Other [ ][ ][ ][ ].[ ][ ][ ] Ha.

30. Total [ ][ ][ ][ ].[ ][ ][ ] Ha.

Note (i) If Scheme is out side command area of Major & Medium Scheme then complete IPU is to be reported.
(ii) If the Scheme is in the Command of Major & Medium Scheme then IPU is to be given as supplemented by MI Scheme. Thus the Gross IPU is to be apportioned in the ratio utilised by Major/Medium and MI Scheme.

31(i) Whether the scheme is under utilised (Only for In-use Schemes) Yes-1,No-2 code: [ ]

31(ii) If yes i.e. code 1 in item 31(i) , reasons for under utilisation of schemes **Code :** [ ]

Non availability of adequate power/fuel – 1 , Mechanical break down – 2 ,
Less discharge of water - 3 , Storage not filled up fully - 4, Siltation of canal/storage- 5
Breakdown of channels - 6, Any other reason - 9

32. Number of Villages covered by the scheme [ ][ ]

33. Specific features of Reservoirs,Tank,Other storages

(a) Designed Storage (in cubic metres) [ ][ ][ ][ ][ ].[ ][ ]

(b) Filled up Storage (during 2023-24) **Code :** [ ]

Full - 1 , upto 3/4 - 2 , upto 1/2 -3, upto 1/4 - 4 , Nil/Negligible filled up - 5

(c) Status of filling up of storage Space **Code :** [ ]

(based on around 50% filling up of storages during last 5 year)

Filled up every year - 1 , Usually filled up - 2 , Rarely filled up - 3 , Never filled up - 4

34. Specific information releting to Water body [ ][ ]

(a) 21 Digit Sl no. as per Water body schedule in which the scheme is functioning

R/U	State		Distt.			Tehsil/Town/block						Village/Ward						Serial No.- within		

(b) Total number of schemes in the village in above water body. [ ][ ][ ]

(c) Sl. number of this scheme within village in the water body [ ][ ]

35. Whether the MI Scheme is used for 'Drinking Water' purpose? Yes-1, No-2 Code: [ ]

36. Whether the scheme was caputured in previous census? Yes-1, No-2 Code: [ ]

Checked by:
Name
Designation of the Suprevisory Officer
Mobile No.
Email:

Name of the Enumerator
Designation
Mobile No.
Email:

SEVENTH CENSUS OF MINOR IRRIGATION SCHEMES
REFERENCE YEAR 2023-24 (AGRICULTURAL YEAR)

GROUND WATER SCHEMES **Code: 03**

I. IDENTIFICATION PARTICULARS

(a)State: _____ **Code :** [ ] **(b) District:** _____ **Code:** [ ][ ][ ]

(c)Block/Tehsil: _____ **Code:** [ ][ ][ ][ ][ ][ ] **(d) Village:** _____ **Code:** [ ][ ][ ][ ][ ][ ]

(e) Latitude _____ **Longitude**_____

(f) Date of Enumeration:(DD/MM/YY) [ ][ ] - [ ][ ] - [ ][ ]

II. SPECIFIC INFORMATION:

1. Serial Number of scheme : [ ][ ][ ][ ]

2. Type of Scheme **Code:** [ ]
Dug well-1, Tube well/ Borewell-2

3.1. If code 1 in item 2 above, type of Dug well:
: Dug-cum-bore well -1, Dug well Pucca -2, Dug well Kutcha -3, Others - 9 **Code:** [ ]

3.2.If code 2 in item 2 above, type of Tube well:
Shallow Tube well-1, Medium Tube well-2, Deep Tube well-3, Artesian Well-4 **Code:** [ ]

4. Owner of the Scheme (Name in case of individual farmer)
Name _____ **Code:** [ ]
Govt. owned - 1, Co-operative owned - 2, Panchayat owned - 3, Owned by Group of farmers - 4,
Owned by individual farmer - 5, Others – 9

5. (a) Khasra number /Plot No./Survey No. in which the scheme is located _____

(b) Location particulars /Land Mark _____

6(a). Total ownership Holding of owner (in case of individual owner only) [ ][ ][ ][ ].[ ][ ][ ] **Ha.**

(b) Social Status of Owner (in case of individual owner only) **Code:** [ ]
Scheduled caste -1 , Scheduled tribe – 2 , OBC- 3, Others- 9

(c) Gender of Owner (in case of individual owner only)
Male-1, Female-2, Transgender-3 **Code:** [ ]

7. Year of Commissioning of the Scheme **Code :** [ ]
Up to 2018-2019 - 1, during 2019-20 - 2, during 2020 -21 - 3, during 2021-22 - 4
during 2022-2023-5, during 2023-24 - 6

8. Details of the scheme
(a) Depth of the Dug well/Tube well (in meters) [ ][ ][ ].[ ][ ] Mtr
(b) Diameter **(In metres for dug well and mm for tube well)** [ ][ ].[ ][ ]
(c) Depth of Bore (in metres) **(in case of Dug-cum-borewell)** [ ][ ].[ ][ ] Mtr
(d) Distance from any nearest Dug well/Tube well (in meters) [ ][ ][ ].[ ][ ] Mtr

9. (a) Cost of construction of the scheme **(Rs.)** [ ][ ][ ][ ][ ][ ]
(b) Cost of machinery **(Rs.)** [ ][ ][ ][ ][ ][ ]
(c) Cost of maintenance during (2023-2024) **(Rs.)** [ ][ ][ ][ ][ ][ ]

10.(a) Major source of finance (upto 2) (For individual owners only) **Code :** [ ][ ]
Bank loan - 1, Government fund - 2, Own savings - 3, Money lender - 4, Others - 9

10(b). If any subsidy/assistance provided by Govt. / PSU , amount for (For All Schemes)
(i) Construction of Scheme/ drilling/digging **(Rs.)** [ ][ ][ ][ ][ ][ ]
(ii) Cost of machinery/ distribution device **(Rs.)** [ ][ ][ ][ ][ ][ ]

11. Current Status of the Scheme

(a) In use - 1, Temporarily Not in Use - 2, Permanently Not in use - 3 **Code:** ☐

(b) If code 2 or 3 in item 11(a), No. of years not in use ☐

12 . If code 2 in item 11 (a) reason for Temporarily "not in use" **Code:** ☐

Non availability of adequate power/fuel – 1 , Mechanical break down – 2 ,
Less discharge of water - 3, Non-availability of finance - 4,
Lack of maintenance - 5, Any other reason - 9

13 . If code 3 in item 11 (a), reason for Permanently "not in use" **Code:** ☐

Due to salinity - 1, Dried up - 2 , Destroyed beyond repair - 3
Due to sea water intrusion - 4, Due to industrial effluents - 5, Availability of
Major / Medium Irrigation Project - 6, Due to other reasons - 9

14. Method used for Water distribution **Code :** ☐

Open Water Channel (lined / pucca) – 1, Open Water Channel(unlined / kutcha) - 2
Under ground pipe – 3, Surface pipe - 4, Drip - 5 , Sprinkler - 6 , Other -9

15. Types of lifting device ☐

Submersible pump - 1 , Centrifugal Pump - 2, Turbine/Jet pump - 3, Manual/animal - 4, Others - 9

16. Source of energy for lifting device **Code :** ☐

Electric - 1, Diesel - 2, Wind Mills - 3, Solar - 4, Manual/animal - 5, Others -9

17. Horse Power of Lifting device ☐☐.☐ **HP**

(ignore if lifting device is manual/animal driven)

18. Number of days pump operated (ignore, if lifting device is manual/animal)

During Kharif season ☐☐☐ **Days**

During Rabi season ☐☐☐ **Days**

For Perennial crops ☐☐☐ **Days**

During Other Season ☐☐☐ **Days**

19. Average hours of pumping per day (ignore, if lifting device is manual/animal)

During Kharif season ☐☐ **Hrs**

During Rabi season ☐☐ **Hrs**

For Perennial crops ☐☐ **Hrs**

During Other Season ☐☐ **Hrs**

20 (a) Whether the scheme is located in the command of Major/ Medium Schemes like Canals etc. **Code :** ☐

Yes --- 1

No --- 2

20(b) If Scheme is in command area i.e. code 1 in item 20(a),

(i) Name of the MMI Project:_____

(ii) reasons for Scheme in the Command Area of the MMI Project **Code :** ☐

Water not available up to field from major/medium scheme-1,Water available but not adequate for irrigation-2
Water available but not useable for irrigation-3, Other reasons-9

20 (c) Whether the scheme is meant only for recharge of Ground water Yes-1, No-2 ☐

(If yes **Keep item 21 to item 31 blank)**

21. Culturable Command Area ☐☐☐☐.☐☐☐ **Ha.**

Season Wise Irrigation Potential Created (IPC)

22.	**Kharif**	**Ha.**
23.	**Rabi**	**Ha.**
24.	**Perennial**	**Ha.**
25.	**Other**	**Ha.**
26	**Total**	**Ha.**

Season wise actual area irrigated during 2023-24 (IPU)

27.	**Kharif**	**Ha.**
28.	**Rabi**	**Ha.**
29.	**Perennial**	**Ha.**
30.	**Other**	**Ha.**
31.	**Total**	**Ha.**

Note (i) If Scheme is out side command area of Major & Medium Scheme then complete IPU is to be reported.

(ii) If the Scheme is in the Command of Major & Medium Scheme then IPU is to be given as supplemented by MI Scheme. Thus the Gross IPU is to be apportioned in the ratio utilised by Major/Medium and MI Scheme.

32(i) Whether the scheme is under utilised (Only for In-use Schemes) Yes-1,No-2 code:

32(ii) If yes i.e. code 1 in item 32(i) , reasons for under utilisation of schemes **Code :**

Non availability of adequate power/fuel – 1 , Mechanical break down – 2 ,
Less discharge of water - 3 , Non availability of finance-4, Lack of Maintenance-5
Any other reason-9

33. Whether the MI Scheme is used for 'Drinking Water' purpose? Yes-1, No-2 Code:

34. Whether this Scheme was captured in previous census? Yes-1, No-2 Code:

Checked by
Name
Designation of the Supervisory Officer
Mobile No.
Email:

Name of the Enumerator
Designation
Mobile No.
Email:

SEVENTH CENSUS OF MINOR IRRIGATION SCHEMES
REFERENCE YEAR 2023-24 (AGRICULTURAL YEAR)
VILLAGE SCHEDULE **Code: 04**

I. IDENTIFICATION PARTICULARS

(a)State: _____ **Code :** | | **(b) District:** _____ **Code :**

(c)Block/Tehsil: Code | | | | | | | **(d)Village:** Code | | | | |

(e) Date of Enumeration: (DD/MM/YY) | | - | | | - | | |

II. SPECIFIC INFORMATION:

1. Is Village Tribal/ Non-Tribal ? **Code :** |
Tribal – 1 , Non-Tribal -2

2. (a) Is the Village covered by Major/ Medium Scheme **Code :** |
Yes -1, No - 2

(b) If yes, Name of Major/ Medium Scheme _____
(The information in items 3 to 7 of this schedule shall be based on village records)

3. Geographical Area In Whole number | | | | | | **Ha.**

4. Cultivable Area In Whole number | | | | | | **Ha.**

5. Net sown Area In Whole number | | | | | | **Ha.**

6. Gross Irrigated Area(By all sources) In Whole number

(i) During Kharif Season | | | | | | **Ha.**

(ii) During Rabi Season | | | | | | **Ha.**

(iii) For Perennial crops | | | | | | **Ha.**

(iv) During Other Season | | | | | | **Ha.**

(v) Total Gross Area Irrigated (Item 6 (i)+6(ii)+6(iii)+6(iv) | | | | | | **Ha.**

7. Net Area Irrigated (By all sources) In Whole number | | | | | | **Ha.**

8. Average Ground Water level (in Metres)

(i) Pre Monsoon) | | | | **Mtrs**

(ii) Post Monsoon) | | | | **Mtrs**

9. Whether Water Users association (WUA) exists in the village

Yes -1, No -2, Not known-3 Code : |

10 Summary of Number of Water bodies as per water body Schedules filled in the village

Pond	Tank	Lake	Reservoirs	Water conservation Schemes/percolation tanks/check-dams	Others	Total (Col. 1 to 6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

11. Summary of M I Schemes in the village as per all scheme schedules filled.

(i) Ground Water Schemes No. | | | |

(ii) Surface Water Schemes No. | | | |

(iii)Total Schemes No. | | | |

Checked by:
Name:
Designation of Supervisory officer:
Mobile No.:

Name:
Designation of Enumerator :
Mobile No:

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Validation Check for Schedule of 2nd Census of Water Bodies

Item/ Field	Validation check	Other check
Serial no. of water body in village/ town	Should be >0	
Unique Identification key	No box should be blank.	
1.1(a) Name of water body.		
1.1(b) Name of Basin & Sub-basin		
1.2(a): Type of water body	(i) The valid codes are 1,2,3,4,5 and 9. (ii) If code is 1,2,3,4,5,disable item 1.2(b).	
1.2(b): If other, the nature of storage		
1.3 Khasra number/plot no. etc		
2. Latitude	No box should be blank.	
3.Longitute	No box should be blank.	
4. Location of water body	Valid codes are 1,2,3,4,5 and 9	
5.Ownership code	(i) The valid codes are 1,2,3,4,5,6,7 and 9. (ii) If code is 6 in item 5, disable items 20(1) and 20(2).	.
6(1). Whether Water body is in use	(i) Valid code is either 1 or 2. (ii) If code is 1, disable item 6(4). (iii) If code is 2, disable item 6(2) & item 6(3).	
6(2). If in use, uses	(i) Valid codes are 1,2,3,4,5,6,7,8 and 9. (ii) If code 1 is not given in any box in item 6(2), disable item 6(3).	No error message even if only one code is given
6(3). If Water body is in use for Irrigation, CCA and IPC of water body	(i) Value for CCA and IPC is >0. (ii) IPC >= CCA	Show warning , if code is 6 in item 5 and IPC is >100
6(4). If not in use, reason	Valid codes are 1,2,3,4,5,6 and 9	

7(1). Type of water body by nature	(i) Valid code is either 1 or 2. (ii) If code is 1, disable item 7.2 and item 8.	
7(2). If man made the type	Valid codes are 1, 2, 3 and 9.	
8. Year of construction and original cost (Only for manmade)	(i) Value of year should be in four digits. (ii) 1500<year<2023 (iii) Value for original cost should be >=0.	Show warning if ownership code in item 5 is 6/7/9 and the value for original cost is > 1, 00,00,000.
9. Year of renovation/ repair	(i) If there is positive entry in year of repair/renovation then the cost of last repair should be >0. (ii) Value in 'year'> value of 'year' in item no. 8 (iii) 1500<year<2023	Show warning if ownership code in item 5 is 6/7/9 and the value for cost of repair is > 10, 00,000.
10. Whether, water body is under repair/ renovation/ restoration	(i) Valid code is either 1 or 2. (ii) If code is 2 in item 10 disable items 10(1), 10(2),10(3),10(4),10(5) and 10(6). (iii) For item 10(2) the year should be in four digits. (iv) For item 10(3) the year should be in four digits and item 10(3)>= item 10(2).	(i) Show warning if ownership code in item 5 is 6/7/9 and value is more than 10,00,000 in item 10(4). (ii) Show warning if ownership code in item 5 is 6/7/ 9 and value is more than 2000 hectares in item 10(5) and item 10(6).
11(1).Whether, water body associated with central scheme	(i) Valid code is either 1 or 2. (ii) If code is 2 in item 11(1) disable item 10(2)	
11(2).Name of Central Scheme	Valid codes are 1, 2, and 3.	
12(1). Does Water Body contains water throughout the year	(i) Valid code is either 1 or 2. (ii) If code is 1 in item 12(1) disable item 12(2)	
12(2).Number of months Water Body contains the water	Valid codes are 1, 2, and 3.	
13. Water spread area of water body	Should be >=0	Show warning, if value is >50
13(1). Water spread area of water body during current year	Should be >=0	
13(2). Maximum water spread area	Should be >=0	

13(3). Minimum water spread area	Should be >=0	
14. Max. depth of water body		Show warning, if value is >100
15. Storage capacity of water body in thousand cu. meter	If code in item 1.2(a) is 1/2/3/4 then value should be >0	
16. Filled up storage during 2023-24	If code in item 1.2(a) is 1/2/3/4 then valid codes are 1,2,3,4 and 5	
17. Whether silt is present in the water body which is reducing its capacity	valid codes are 1,2	
18. Status of filling up of storage space	If code in item 1.2(a) is 1/2/3/4 then valid codes are 1,2,3 and 4	
19(1). Number of cities/ towns/ villages benefitted	If item 6(1) code is 1, the value should be >=0	(i) Show warning, if value is >10 for Towns. (ii) Show warning, if value is > "100" for Village.
19(2). Number of people directly benefited by water body	If item 6(1) code is 1, the value is >=0	
20(1). Whether water users association is formed	(i) Valid codes are 1, 2 and 3. (ii) If code is 2 or 3, disable item 20(2).	
20(2) If Yes in item 17(1)	(i) Valid code is either 1 or 2 in 20(2)(a). (ii) For item 20(2)(b) the value is >0	
21. Whether water body is included in DIP/SIP plan	Codes are either 1 or 2	
22(1). Whether any area of water body is encroached	(i) Valid code is either 1 or 2. (ii) If code in 22(1) is 2, disable 22(2) and 22(3).	
22(2).can extent of encroachment be assessed	(i) Valid code is either 1 or 2. (ii) If code is 2, disable item 22(3).	
22(3).approximate percentage of area encroached	Value should be >0	
23. whether water body is standalone or connected	Valid code is either 1 or 2. If code is 1, disable item 23(1).	

23(1) If connected, number of connected water bodies	Value should be >0	

Annexure - VII

Validation Check for Surface Water Schedule

Item/ Field	Validation check	Other check
1. Serial no. of the scheme	Should be unique and greater than zero	Submission of schedule will not be allowed without Serial Number
2. Type of Scheme	(i) Valid code is 1 or 2. (ii) If code is 1 then disable items 3.2, 14, 15, 16, 17, 18. (iii) If code is 2 then disable item 3.1.	
3.1 Nature of Surface Flow Scheme	(i) Valid codes are 1, 2, 3, 4, 5, 6, 7 and 9. (ii) If code is 4,5,6,7,9 in item 3.1 then disable items 33(a),33(b) and 33(c).	
3.2 Nature of Surface Lift Scheme	(i) Valid codes are 1, 2, 3, 4 and 9. (ii) If code is 1,2,3,9 in item 3.2 then disable items 33(a),33(b) and 33(c).	
4. Ownership code	(i) Valid codes are 1,2,3,4,5 and 9 (ii) Disable items 6(a), 6(b), 6(c) and item 9(a) if code is 1/2/3/4 or 9 in item 4.	
5. Khasra number/ plot number		
6. (a) Total holding of Owner	Item 6(a) >=0 and item 6(a) <= 9999.999	Show the warning when value is (i) equal to "0" or (ii) More than 100.000
6. (b) Social Status of Owner	Valid codes are 1,2,3 and 9	
6. (c) Gender of Owner	Valid codes are 1,2 and 3.	
7. Year of Commissioning of the Scheme	Valid codes are 1,2,3,4,5.	.
8. (a) Cost of Construction (Rs.)	Item 8(a)>=0 and Item 8(a)<= 9999999	(i) If code is 1, in item 2 then show warning where the value is more than 10,00,000. (ii) If code is 2, in item 2 then show warning where the value is more than 2,00,000.

8. (b) Cost of Machinery (Rs.)	Item 8(b)>=0 and Item 8(b)<= 9999999	(i) If code is 1, in item 2, then show warning where the value is more than 1,00,000. (ii) If code is 2, in item 2 then show warning where the value is more than 2,00,000.
8. (c) Cost of maintenance during (2022-23) (Rs.)	Item 8(c)>=0 and Item 8(c)<= 9999999	Show warning when (i) the value is more than 1,00,000. (ii) Item 8(c) <= Item 8(a) (Updated in meeting held on 30-09-2020)
9(a) Major Source of finance	Valid codes are 1,2,3,4 and 9.	No error message even if only one code is given.
9(b)(i) If any subsidy / assistance provided by Govt. / PSU, amount for construction	Item 9(b)(i) >=0 and Item 9(b)(i)<= item 8(a)	If no subsidy/ assistance provided 'zero' is to be entered, and in case the item is kept blank, a message box showing 'in case no subsidy/ assistance is provided, please enter zero' may be shown.
9 b(ii) If any subsidy/assistance provided by Govt./PSU for cost of machinery/ distribution device (Rs.)	Item 9(b)(ii) >=0 and 9(b)(ii)<= item 8(b)	
10 (a) Current status of Scheme	(i) The valid codes are 1,2 or 3. (ii) If code is 1 in item 10(a) then disable item 10(b), 11 and 12. (iii) If code is 2 in item 10(a) then item 12 and 31 to be disabled. (iv) If code is 3 in item 10(a) then items 11, 13, 14, 15, 16, 17, 18, 26, 27, 28, 29, 30, 31 to be disabled.	
10(b) If not in use (years)	If item 10(a) value is 2 then Item 10(b) should be <=2. If Item 10(a) value is 3 then Item 10(b)should be <=6	
11. Reason code for Temporarily "not in use" Scheme	Valid codes are 1, 2, 3, 4, 5,6,7 and 9.	
12. Reason code for Permanently "not in use" Scheme	Valid codes are 1,2,3,4,5,6,7 and 9.	

13. Method used for water distribution	Valid codes are 1, 2, 3, 4, 5, 6 and 9.	
14. Type of lifting device	(i) Valid codes are 1,2,3,4 and 9. (ii) If code is 4 in item 14, disable item 16,17 and 18.	
15. Source of energy for lifting device	(i) Valid codes are 1,2,3,4,5 and 9. (ii) If code is 4 in item 14 then code should be 5 in item 15.	
16. Horse Power of lifting device	Value is >0	Show warning when horse power is more than 10
17 Number of days pump operated.	Value is >= 0	
18 Average hours of pumping per day	Information in this item to be reported only when item 17 is >0 in corresponding season.	
19(a) Location of scheme	(i) Valid code is either 1 or 2. (ii) Disable item 19(b) if code is 1 in item 19(a).	
19(b)(i) and (ii) : Name of command area and reason for scheme in command area	For 19 (b) (ii) Valid codes are 1, 2, 3 and 9.	
19 (c)Whether the scheme is meant only for re-charge of ground water	(i) The valid code is either 1 or 2. (ii) If code is 1, then disable items 20 to 30.	If code 1 is entered, show the warning message “Are you sure this scheme is meant for recharge of Ground water only”?
20 Culturable Command Area (CCA)	The Value should be <= 2000 hectares.	(i) If code is 1 in item 2, show warning if CCA is >500. (ii) If code is 2 in item 2, show warning if CCA is >100.
21 IPC Kharif	Item 21 >= 0 and Item 21 <= Item 20	
22 IPC Rabi	Item 22 >= 0 and Item 22<= Item 20	
23 IPC Perennial	(i) Item 23 >= 0 and Item 23<= Item 20. (ii) Item 21 + Item 23 <= Item 20. (iii) Item 22+ Item 23 <= Item 20 and (iv) Item 24 + Item 23 <= Item 20	
24 IPC Other	Item 24 >= 0 and Item 24<= Item 20	

25 IPC Total	(i) Item 25 = sum (21+22+23+24) and (ii) Item 25 >=item 20	
26 IPU Kharif	Item 26 >=0 and Item 26 <= Item 21	
27 IPU Rabi	Item 27 >=0 and Item 27 <= Item 22	
28 IPU Perennial	Item 28 >=0 and Item 28 <= Item 23	
29 IPU Other	Item 29 >=0 and Item 29 <= Item 24	
30 IPU Total	Item 30 = Sum (26+27+28+29)	
31 (i) Whether the scheme is under utilised (Only for in-use Scheme)	(i) Valid code is either 1 or 2. (ii) If code is 2 in item 31(i), disable item 31(ii).	
31(ii) Reasons for under utilistion	The valid code are 1,2,3,4,5,6 and 9	
32.Number of villages covered by the scheme	Value is >= 1	
33(a) Designed storage in cubic meters	Value is >0	
33(b)Filled up storage (during 2017-2018)	Valid codes are 1,2,3,4,5	
33(c) Status of filling up of storage (based on last 5 years)	Valid codes are 1,2,3,4	
34(a) 21 Digit water body sl. No.	Each field should has value >=0	This item is optional only in the case of surface lift schemes
34(b) Total number of schemes in the village in the water body	Value >=0	This item is optional only in the case of surface lift schemes
34(c) Serial number of the scheme within village in the water body.	Value should be <= item 34(b)	This item is optional only in the case of surface lift schemes
35. MI Scheme being used for Drinking Water Purpose?	Valid Codes are 1, 2	

Annexure - VIII

Validation Check for Ground Water Schedule

Item/ Field	Validation check	Other check
1. Serial no. of the Scheme	Should be unique and greater than zero	submission of schedule will not be allowed without Serial Number
2. Type of Scheme	(i) Valid code is 1 or 2. (ii) If code is 1 in item 2, disable item 3.2. (iii) If code is 2 in item 2, disable item 3.1.	
3.1 Type of Dug well	(i) Valid codes are 1,2,3 and 9. (ii) Disable item 8 (c) if: (a) code is 2 in item 2 or (b) code is 2,3,9 in item 3.1.	
3.2 Type of tube well/ bore well	Valid codes are 1,2,3 and 4.	
4. Ownership code	(i) The valid codes are 1,2,3,4,5 and 9. (ii) Disable items 6(a), 6(b), 6(c) and item 10(a) if code is 1/2/3/4 or 9 in item 4.	
Item 5 (a) and (b) Khasra number/plot no. etc and Location particulars	Should not be 'NULL'.	
6. (a) Total Ownership Holding of owner	Item 6(a)>0 and <= 9999.999.	Show the warning where value is (i) equal to "0" or (ii) more than 1000.000
6. (b) Social Status of Owner	Valid codes are 1,2,3 and 9	
6. (C) Gender of Owner	Valid codes are 1, 2 and 3.	
7. Year of Commissioning of the Scheme	Valid codes are 1,2,3,4, 5 or 6.	

8(a) Depth of the Dug well/Tube well (in meters)	(i) Item 8(a)>0 and Item 8(a)<=999.99. (ii) If code in item 3.2 is 1, then Item 8(a) <=35. (iii) If code in item 3.2 is 2, then Item 8 (a) >35 and <=70 (iv) If code in item 3.2 is 3, then Item 8(a) >70.	(i) If code 1 in item 2, show warning if value >50. (ii) If code 2 in item 2, show warning if value is >150.
8(b) Diameter (unit in meters for dug well and millimeters for tube well)		If code is 1 in item 2, then show warning if value is >20.
8(c) Depth of Bore (in meters) in case of dug-cum-bore well	Item 8 (c) is >0.	Show warning if value is >150
8(d) Distance of nearest dugwell/Tube-well (in meters)	Item 8(d)>0 and Item 8(d)<999.99	Show warning if value is >500
9. (a) Cost of Construction (Rs.)	Item 9(a)>=0 and Item 9(a)<= 9999999	(i) If code is 1 in item 2 then show warning when the value is more than 2,00,000. (ii) If code is 1 or 2 in item 3.2, then Show the warning when value is more than 1,00,000. (iii) If code is 3 in item 3.2 ,show warning if value is >5,00,000.
9. (b) Cost of Machinery (Rs.)	Item 9(b)>=0 and Item 9(b)<= 9999999	(i) If code is 1 in item 2 then show warning when the value is more than 2,00,000. (ii) If code is 1 or 2 in item 3.2, then Show the warning when value is more than 1,00,000. (iii) If code is 3 in item 3.2,show warning if value is >5,00,000.
9. (c) Cost of maintenance during (2017-18) (Rs.)	Item 9(c)>=0 and Item 9(c)<= 9999999 and Item 9(c)<= Item 9(a)	(i) If code is 1 in item 2 then show warning when the value is more than 1,00,000.

		(ii) If code is 1 or 2 in item 3.2, then Show the warning when value is more than 1,00,000. (iii) If code is 3 in item 3.2, show warning if value is >2,00,000.
10(a) Major Source of finance	Valid codes are 1,2,3,4 and 9.	No error message even if only one code is given.
10(b)(i) If any subsidy / assistance provided by Govt. / PSU, amount for construction	Item 10(b)(i) >=0 and Item 10(b)(i)<= item 9(a)	If no subsidy/ assistance provided 'zero' is to be entered, and in case the item is kept blank, a message box showing 'in case no subsidy/ assistance is provided, please enter zero' may be shown
10 b(ii) If any subsidy/assistance provided by Govt./PSU for cost of machinery/ distribution device (Rs.)	Item 10(b)(ii) >=0 and 10(b)(ii)<= item 9(b)	
11 (a) Current status of Scheme	(i) The valid codes are 1,2 or 3. (ii) if code is 1 in tem 11(a), disable item 11(b), 12 and 13. (iii) if code is 2 in item 11(a), disable item 13 and 32. (iv) if code is 3 in item 11(a), items 12, 14, 15, 16,17, 18,19, 27, 28,29,30,31,32 to be disabled.	
11(b) If not in use (years)	(i) If Item 11(a) value is 2 then Item 11(b) should be <=2 (ii) If item 11 (a) code is 3 then item 11(b) should be <=6	
12. Reason code for Temporarily "not in use" Scheme	Valid codes are 1, 2, 3, 4, 5 and 9.	
13. Reason code for Permanently "not in use" Scheme	Valid codes are 1,2,3,4,5,6 and 9.	

14. Method used for Water distribution	Valid codes are 1,2,3,4,5,6 and 9.	
15. Type of lifting device)	(i) Valid codes are 1,2,3,4 and 9 (ii) If code is 4 in item 15, disable items 17,18 and 19.	
16. Source of energy for lifting device	(i) Valid codes are 1,2,3,4,5 and 9 (ii) If code is 4 in item 15 then code in item 16 should be 5.	
17. Horse Power of lifting device	(i) Value should be >0. (ii) If code is 3 in item 3.2 then value in item 17 should be >= 5HP.	Show warning where horse power is more than 30.
18 Number of days pump operated.	Value is >= 0.	
19 Average hours of pumping per day	Information in this item to be reported only when item 18 is >0 in corresponding season.	Item should be between 0 to 24
20(a) Location of scheme	(i) Valid code is either 1 or 2. (ii) Disable item 20(b) if code is 1 in item 20(a). .	
20(b)(i) and (ii): Name of Command area and Reason for scheme in command area	For 20(b)(ii) Valid codes are 1, 2, 3 and 9.	
20 (c)Whether the scheme is meant only for re-charge of ground water	(i) Valid code is either 1 or 2. (ii) If code is 1 then disable items 21 to 31.	If code 1 is entered, show the warning message “Are you sure this scheme is meant for recharge of Ground water only”?
21 Culturable Command Area (CCA)	The Value should be <= 2000 hectares.	Show warning when CCA is more than 100.
22 IPC Kharif	Item 22 >= 0 and Item 22 <= Item 21	
23 IPC Rabi	Item 23 >= 0 and Item 23<= Item 21	
24 IPC Perennial	(i) Item 24 >= 0 and Item 24<= Item 21. (ii) Item 22 + Item 24 <= Item 21. (iii) Item 23 + Item 24 <= Item 21 and (iv) Item 25 + Item 24 <= Item 21	
25 IPC Other	Item 25 >= 0 and Item 25<= Item 21	

26 IPC Total	(i) Item 26= sum (22+23+24+25) and (ii) Item 26 >=item 21	
27 IPU Kharif	Item 27 >=0 and Item 27 <= Item 22	
28 IPU Rabi	Item 28 >=0 and Item 28 <= Item 23	
29 IPU Perennial	Item 29 >=0 and Item 29 <= Item 24	
30 IPU Other	Item 30 >=0 and Item 30 <= Item 25	
31 IPU Total	Item 31 = Sum(27+28+29+30)	
32 (i) Whether the scheme is under utilised (Only for in-use Scheme)	(i) Valid code is either 1 or 2. (ii) If code is 2 in item 32(i), disable item 32(ii).	
32(ii) Reasons for under utilistion	The valid code are 1,2,3,4,5,9	
33. MI Scheme used for Drinking Water Purpose?	Valid Codes are 1 and 2	

Annexure - IX

Validation Check for Village Schedule

Item no.	Description of Validation Check	Other Check
1. Is Village Tribal/ Non-Tribal	Valid codes are 1 or 2	
2. (a) Is the Village covered by Major/ Medium scheme	Valid codes are 1 or 2	
2(b) If yes, Name(s) of Major/ Medium Scheme	If 2(a) value is 1, then fill the name of scheme	
3.Geographical Area	Value Must be >0	Show the warning where value is more than 20000.
4. Cultivable Area	Value Must be >=0 and Value must be <= item 3	Show the warning where value is more than 20000
5. Net sown area	Value Must be >=0 and Value must be < item 4	Show the warning where value is more than 20000
6. Gross Irrigated Area(by all sources)		
6(i) Kharif	Value Must be >=0 and <= item 7	Show the warning where where value is more than 10000
6(ii) Rabi	Value Must be >=0 and < = item 7	
6(iii) Perennial	Value Must be >=0 and <= item 7 . Item 6(iii)+ item 6(i)<= item 7 Item 6(iii)+ item 6(ii)<=item 7 Item 6(iii)+ item 6(iv)<=item 7	
6(iv) Others	Value Must be >=0 and <= item 7	
6(v) Total Gross Area Irrigated	6(v)= 6(i)+ 6(ii)+ 6(iii)+ 6(iv) and value must be >= item7	Show the warning where value is more than 20000
7. Net Area Irrigated	Value Must be >=0 and <=item 5	Show the warning where value is more than 20000
8.(i) Average Ground Water level (in meters) Pre Monsoon	Value Must be >0	Show the warning where value is more than 100
8.(ii) Average Ground Water level (in Meters) Post Monsoon	Value Must be >0	show the warning where (i) value is more than 100 or (ii)Value in item 8(ii)>item 8(i)
9. Whether Water Users Association (WUA) exists in the village	Valid codesare 1, 2 and 3.	
10 Summary of number of water bodies	The field shall be automatically generatedfrom the schedule of water bodies	
11.(i) Ground Water schemes	The fields shall be automatically generated from the ground water and surface schedules.	
11(ii) Surface Water schemes		
11(iii) Total		

Annexure -X

PROVISION OF FUND

As a token of appreciation of work entrusted to various officials in addition to their normal duties and not as compensation or remuneration for additional work, the officials who would be involved in field work, scrutiny, inspection of field work and schedules at the District/ Block/village levels shall be paid suitable honorarium which will be drawn from the grants released to the States/UTs by the Department of Water Resources, RD & GR for the 7th Minor Irrigation and 2nd Census of Water Bodies. The rates of grant towards honorarium have been decided as below for different administrative levels for primary and supervisory work. The honorarium for each District and Block is fixed and it is expected that only one officer from each District and Block would go to the field for physical verification of the filled-in schedules.

Enhancement of Rates of Honorarium: In the 7th MI Census and 2nd Census of Water Bodies, rates of honorarium for coordination, supervision and conduct of the field work shall be as under:

7th MI Census

S.No	Item	Rate (in Rs.)
A	Honorarium	
1	Field Allowance per Village for enumerator (Maximum)	900
2 (i)	Patwari Allowance per Village	300
2 (ii)	Per Block	3170
2 (iii)	Per District	6480
3	State/UT	
3 (i)	Per Large State /UT(i.e. States with number of MI schemes >= 15,000 as per 5th MI Census as per Annexure)	18000
3 (ii)	Per Small State/UT(i.e. States with number of MI schemes < 15,000 as per 5th MI Census as per Annexure)	12000
4	Scrutiny per village for 35% schemes and 100% village schedule	360

B	Printing cost of user manual **per 10 village**	20
C	Contingency per Village	290
D	Computerisation cost per schedule (maximum including validation)	3

2nd census of water bodies

S.No	**Item**	**Rate (in Rs.)**
A	Honorarium	
1	Field Allowance per Village for enumerator (Maximum)	720
2	Per Block	960
3	Per District	1320
4	State/UT	3600
5	Scrutiny per village for 35% water bodies schedule	120
B	Contingency per Village	90
C	Computerisation cost per water body schedule (maximum including validation)	3

Honorarium rates for the use of the personal mobile devices of the field functionaries for capturing the data of 7th MI Census and2nd Census of water bodies will be Rs. 750/- per village. However, if any State/UT wishes to take mobile handsets on rent basis, flexibility of doing so will be allowed subject to the condition that the total cost should not exceed the allocation mentioned as above.

Provision of Rs. 5,00,000/- per State has been kept towards cost of purchasing computer, printer etc. for carrying out the census related work only.

In addition, 20% of total cost of 2nd Census of Water bodies has been earmarked towards fieldwork, printing cost of user manuals and data validation costs, scrutiny, supervision, inspection, coordination at State level, contingency expenditure etc. for urban areas.

Contingency amount is to be spent on

i. Providing State/ district level trainings to enumerators and supervisors,
ii. advertisement for MI Census, publicity etc.,

iii. transportation to be used by the Central and Statistical cell teams only for supervisory work during the census. (The expenditure on transport should not be more than 2% of the total contingency amount for the States except Kerala where it should not be more than 15% of the total contingency fund, as per practice followed in XII Plan). Facility of vehicles is applicable to entitled officers at State Headquarters only. Hiring of vehicles for field visits by District/Tehsil/non-entitled Headquarter officials is not permitted. Funds provided under the Contingency head may be used for this purpose.

iv. Providing training honorarium to the District level officers, who would provide training to the enumerators and Block level supervisors maximum upto @ Rs. 1650/ - per day including transport

v. Providing Rs 165/ enumerator/ Block officer as TA , DA for attending the training and

vi. any other unforeseen miscellaneous expenditure of contingent nature which may arise during the conduct of the Census, subject to ceiling of total contingency expenditure sanctioned for the State/UT for 7th MI Census. Contingency amount Rs. 90/- per village for 2ndCensus of Water bodies has been provided, as training, field work etc. of Census of Water bodies will be carried out in convergence with 7th MI Census.

vii. Also, where the sanctioned posts are not filled up or lying vacant for a long time due to various administrative reasons, temporary staff may be engaged on contract/deputation basis as per the rules admissible under the respective States/UTs against the vacant posts.

Field allowance: Rs. 900/- as maximum Field allowance per village for 7th MI Census is flexible and to be fixed by the States/UTs keeping in view the number of MI schemes, the distance and terrain in their States. Similarly, Rs. 720 per village as maximum Field allowance per village for 2ndCensus of Water Bodies is flexible and to be fixed by the States/UTs keeping in view the approximate number of water bodies, the distance and terrain in their States. The field allowance is flexible and to be fixed by the States/UT after due deliberations keeping in view the no. of schemes, the distances and terrain in their states. For example:

- In a State with normal terrain, if there is large variation in the number of schemes in various regions of the State, the State may decide to give Rs. 470 for villages with < 50 schemes, Rs. 625 for villages with schemes> 50 but < 100, Rs. 780 for villages with Schemes > 100 but < 300 and Rs. 900 for villages with schemes > 300.

- In a hilly State where number of schemes are less and terrain is uniform Rs 470 for villages with schemes< 10, Rs 625 for villages with schemes > 10 and < 20, Rs. 780 for villages with schemes> 20 but < 50 and Rs. 900 for villages with schemes > 50.
- In plains/hills where distances between schemes is large and schemes are few Rs. 900 can be kept per village even when number of schemes is less.
- For Census of Water body schedules i.eRs. 375 for villages with < 5 water bodies, Rs. 500 for villages with water bodies > 5 but < 10, Rs. 625 for villages with water bodies > 10 but < 30 and Rs. 720 for villages with water bodies > 30.
- In the Census of urban water bodies, the equivalent geographical area corresponding to 'village' may be ward or Group of wards or town. The size of wards varies from State to State or within the State. So the decision regarding the rate of honorarium per ward or Group of wards or town in a State is left to the State Government subject to a maximum of Rs.720/- prescribed for a village. The State may decide to give Rs.125/- for a small ward, Rs.500/- for a group of 5 to 10 wards or Rs.720/- for a small town, the maximum limit being Rs.720/-.

  The rates of honorarium for 35% scrutiny will be Rs.120/- maximum per ward/group of wards/town as decided by State Government. Similarly, the contingency per ward/group of wards/town would be limited to a maximum of Rs.90/-.

  However, while working out the rate of honorarium, scrutiny and contingency for the conduct of Census of Water Bodies in urban areas, care should be taken that the total cost of conducting the Census of Water Bodies in urban areas (i.e. field work, scrutiny, supervision, inspection, coordination at State level, contingency, printing cost of schedules and validation costs) does not exceed 20% of the total cost (i.e. Rural + Urban) of conduct of 2nd Census of Water Bodies in the State.

Patwari Allowance: Rs.300/- is kept for Patwari who will canvass the village schedule and provide necessary assistance to the enumerator for data collection for both Census in the village. This would be handed over to Patwari immediately after he submits his form.

Funds will be released to State through Single Nodal Agency (SNA) route following the procedures/instructions related to SNA issued by Department of Expenditure, Ministry of Finance. As per these instructions, not more than25% of the amount earmarked for a state for a CSS for the financial year can be released in the beginning of a financial year. Additional central share (not more than 25% of annual grant at a time) will be released upon utilization of at least 75% of the funds released earlier and compliance of the conditions of previous sanction.

Further, the releases to the States/UTs will also depend on the Stage of completion of Census activities. States/UTs will be eligible for 25% of the total estimated cost in advance for initiating work relating to 7th Minor Irrigation Census and 2nd Census of water bodies, next 25 %, after completion of preparatory work including ensuring readiness of tools/technologies/ equipments, completion of field trainings, & start of primary enumeration/field work on ground, next 25% after completion of fieldwork & balance 25% after completion of data validation and receipt of final comments of States/UTs on observations of the Ministry on the Census data. The total grant to States /UTs shall be regulated as per the norms reported in above paras. In addition, grants-in-aid will be provided to host States/UTs for organizing Regional Training Workshops & Data Processing Workshops on behalf of the Ministry, for publication State/UT level Census reports and for meeting balance expenditure of 6th MI Census and 1st census of water bodies. The total grant of the Census for both 7th MI Census and 2nd Census of Water Bodies for each State/UT, has been estimated based on the currently available information and may be revised based on the total work done. State shall submit detailed work plan for both Census along with time lines for completion of each stage of Census, at the time of submission of proposal for first installment.

Recommended Mobile Device Configuration for Data Enumeration

For data collection, the specifications of the mobile phones to be used are as follows:

1. **Operating System**
    - **Android Version:** Android 10 or later
      Ensures compatibility with modern apps, security patches, and smooth system operation.
2. **Hardware Specifications:**
    - **RAM:** 6GB or more
      Provides sufficient memory for running data-heavy applications and multiple tasks simultaneously without lag.
    - **Storage Capacity:** 64GB or more
      Allows for extensive data collection, storage of large datasets, and smooth operation of data-intensive apps. Expandable storage is advantageous for additional space.

जल संसाधन, नदी विकास और गंगा संरक्षण विभाग

Department of Water Resources, River Development & Ganga Rejuvenation

लघु सिंचाई (सांख्यिकी) विंग

Minor Irrigation (Statistics) Wing

द्वितीय तल, बी विंग, लोक नायक भवन, नई दिल्ली

2nd Floor, B Wing, Lok Nayak Bhawan, New Delhi

mistat-mowr@gov.in