सत्यमेव जयते

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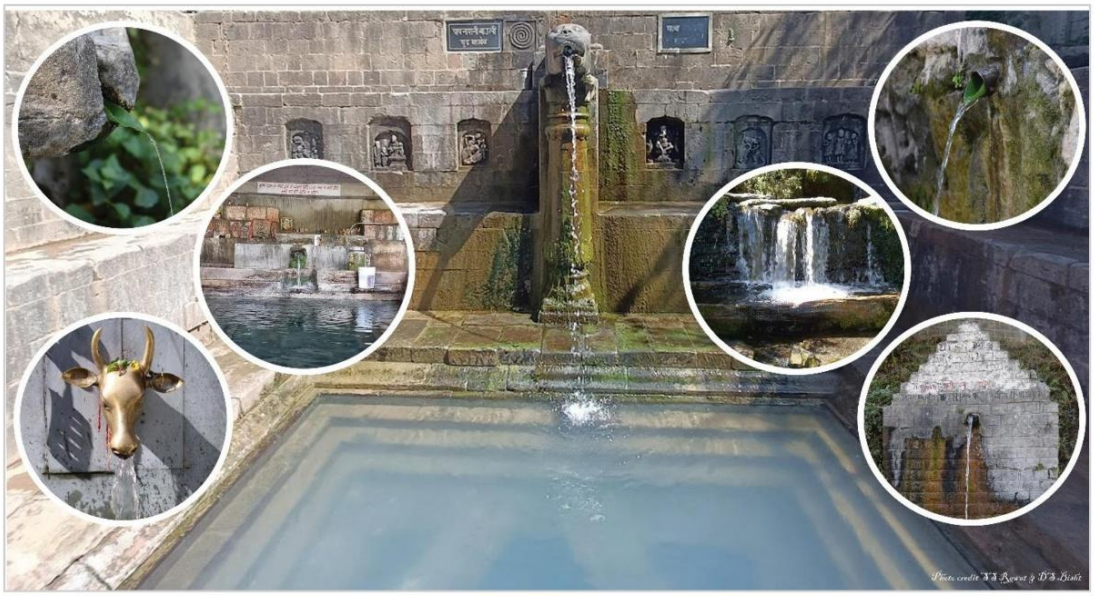
संदर्भ वर्ष 2023-24

जुलाई 2023 - जून 2024

MANUAL FOR FIRST CENSUS OF SPRING

Reference year 2023-24

July 2023 – June 2024



भारत सरकार

जल शक्ति मंत्रालय

जल संसाधन, नदी विकास एवं गंगा संरक्षण विभाग

Government of India

Ministry of Jal Shakti

Department of Water Resources, River Development & Ganga Rejuvenation

सी आर पाटील
C R Paatil



सत्यमेव जयते

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

Message

Springs are a crucial source of water for millions of people living in the mountain ranges across India. In these mountainous areas, villages and hamlets are often located on ridges for strategic and safety reasons, where rivers flow through deep valleys, and glaciers are positioned higher up the mountains. Due to these geographical challenges, drawing water from rivers and glaciers is not economically viable. In such regions, local springs become the primary source of water for drinking, domestic use, and agriculture for both rural and urban communities.

These small but essential water resources play a critical role in addressing water scarcity in mountainous areas, especially when larger rivers are unable to meet the demand. Recognizing the importance of springs in sustaining water security in these regions, the Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD & GR) is conducting the first-ever Spring Census in India, alongside the 7th Minor Irrigation (MI) Census, the 2nd Census of Water Bodies, and the 1st Census of Major & Medium Irrigation Projects, all under the centrally sponsored 'Irrigation Census' scheme.

To facilitate the smooth execution of the Spring Census, a comprehensive manual has been prepared, covering key concepts, definitions, methodology, frequently asked questions, and other essential guidelines. I trust that the concerned officials will utilize this manual effectively to ensure the collection of accurate and reliable data from the 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

Mountain springs are the primary source of water for rural households in the Himalayan region, and for many, the sole source of water. Both rural and urban communities rely on springs for drinking, domestic, and agricultural water needs. Despite their importance, springs have received inadequate attention and are facing threats, including declining discharge due to increased water demand, changing land use patterns, ecological degradation and erratic precipitation trends. To address this, a database on springs is essential for restoration, revival, and sustenance of springs.

In light of the importance of springs, I am happy to inform that the Ministry of Jal Shakti, Department of Water Resources, River development and Ganga Rejuvenation is undertaking the 1st Census of Springs, along with the 7th Minor Irrigation Census, 2nd Census of Water Bodies, and 1st Census of Major and Medium Irrigation Projects.

I hope the Manual will serve as a uniform guide for all States and Union Territories to follow during the census, ensuring high-quality data. The manual outlines concepts, definitions, and procedures for the 1st Census of Springs. The census shall be undertaken paperless, entirely in digital mode to ensure accuracy and efficiency.

(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

Springs are the source of water from generations to millions of inhabitants in the mountain ranges across the country. Proximity of springs was the first and foremost criteria for settlement of villages and hamlets in the mountainous areas and hence local populace have been solely dependent on these springs for theirs daily water needs. Local people have developed traditional techniques and wisdom to manage these springs in olden days. As villages and hamlets expanded over time, the catchment areas of these springs decreased/degraded, leading to a subsequent reduction in discharge and degradation of the spring water quality. The rate of diminishing discharge and degrading quality of springs water have also been exacerbated by the changing climate which is significantly higher in mountainous areas than rest of the country.

In 2018, NITI Aayog acknowledged the importance of springs and took cognizance for the rapid drying/diminishing of these springs across the country particularly in Indian Himalayan Region (IHR) and constituted a working group on "Inventory and revival of springs in the Himalayas for water Security". The report revealed that the available secondary data on springs underestimate the actual counts of springs and hence the report emphasized on the urgent need of spring mapping and creation of Web-enabled database/Web portal on which springs can be mapped/tagged. This available database would be immensely useful to formulate effective policies, plannings and schemes for springshed management in the country in changing climate.

The Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti has been conducting census of Minor Irrigation (MI) since 1986-87. The census is being conducted under the centrally sponsored scheme 'Irrigation Census' which is a standalone component under the Umbrella Scheme- Pradhan Mantri Krishi Sinchai Yojana and other schemes. Six MI census have been conducted so far. Ministry had undertaken First Census of Water Bodies in convergence with the 6th MI Census with reference year 2017-18.

In view of the importance of springs in sustaining the water demand of a large portion of the country (about 15%), I am happy to inform that MI (Stat.), DoWR, RD & GR is undertaking the 1st Spring Census along with the forthcoming 7th MI and 2nd Water bodies censuses in the country. The census will be conducted entirely in digital mode, utilizing a mobile application, thereby eliminating the use of paper and resulting in significant savings in resources, including time and cost.

To ensure the smooth execution of the spring census, a comprehensive reference manual has been jointly prepared by the Scientists of Cell for Spring Studies (CeSS), National Institute of Hydrology (NIH), Roorkee, and MI (Stat.), DoWR, RD&GR, Ministry of Jal Shakti. This collaborative effort involved consultations with various state and central government departments, NGOs, and domain experts through workshops, brainstorming sessions, and meetings. The manual has been enhanced with feedback from pilot testing of the mobile app, regional/state-level workshops, and the User Acceptance Test (UAT) of the mobile app. This document aims to assist field-level functionaries, primary workers, and enumerators in efficiently collecting data on the ground. The manual serves as a guide, outlining concepts, definitions, and procedures to be uniformly followed by all states and union territories during fieldwork. I hope that the concerned officials involved in the conduct of census will make full use of this document for collection of data of 1st Spring Census of the country.

(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
CGWB	Central Ground Water Board
CWC	Central Water Commission
DES	Directorate of Economics and Statistics
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
LGD	Local Government Directory
MI	Minor Irrigation
NIH	National Institute of Hydrology
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
SASA	State Agricultural Statistics Authority
SLO	State Level Officer
SWIC	State Water Informatics Centre
UAT	User Acceptance Test
UT	Union Territory

CHAPTER ONE:

INTRODUCTION

1.1 INTRODUCTION

1.2 Springs, manifestation of groundwater on the surface, are the source of water supply to millions of inhabitants in the mountain ranges across the country. According to the working group report of NITI Aayog, a gross estimate of nearly 200 million Indians depend on spring water across the country – mainly in the Indian Himalayan Region, Western Ghats (Sahyadri mountain range, traversing the states of Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu), Eastern Ghats (Northern Odisha, Andhra Pradesh, and Tamil Nadu) and Central India (Satpura and Vindhyas mountains) – which implies that more than 15% of India's population relies on spring water to meet their water demands.

1.3 In mountainous areas, villages/hamlets are located at local ridges for strategical and safety point of view, these are the zones where the rivers flow in deep valleys and the glaciers are higher up in the mountains, therefore, drawing water from these two sources is not economically viable. In such situation local springs are the only source for meeting the drinking, domestic, and agricultural water needs for both rural and urban communities. In addition to this, these springs drain into and sustain several rivers in the lean season and there is hardly any river that is not fed by the springs. These small water resources play vital role in solving water scarcity in mountainous regions of India, when even large rivers fail to deliver.

1.4 In view of the importance of springs, need for conducting spring mapping was stressed by the NITI Aayog Working group-I report on "Inventory and Revival of Springs in the Himalayas for Water Security" released in 2018. Report took the stock of magnitude of drying of springs in Indian Himalayan Region (IHR) and found that half of the perennial springs have already dried up or have become seasonal resulting in acute water shortages across hundreds of Himalayan villages. The report revealed that the available secondary data on springs underestimate the actual count of spring and hence the report emphasized on the urgent need of spring mapping and creation of Web-enabled database/web portal on which springs can be mapped/tagged by all states, Govt. Depts., R&D Institutions and NGOs working on springs.

1.5 Further 23rd report of Parliamentary Standing Committee on Water Resources (2022-23) urged upon the DoWR, RD&GR to take necessary steps for the revival of springs in the Himalayan region as millions of people depend only on Springs for their drinking, domestic, and agricultural water needs. DoWR, RD&GR constituted a steering committee on "Springshed Mapping of Indian Himalayan Region (IHR) Including Mountainous Regions of the Country and Springshed based Watershed Management Plan" to expedite the springshed management work in the country. Committee ascertain the adequacy and gaps in expediting the springshed management in the country and found that there is no systematic mechanism, uniform format and techniques for spring and springshed mapping in the country which is the first and foremost hurdle for expediting the springshed management in the country. Therefore, committee formulated a Resource Book on "Springshed Management in the Mountainous Regions of India https://mowr.nic.in/core/WebsiteUpload/2024/Resource%20book_Springshed_Management_Final.pdf " which act as technical document to guide the agencies/depts for spring and springshed mapping in the country.

1.6 In view of the importance of springs in sustaining the water security in the mountainous parts of the country, DoWR, RD & GR took decision to start the 1st spring census of the country along with the conduct of 7th MI Census and 2nd Census of Water Bodies under the centrally sponsored scheme 'Irrigation Census'.

*****

CHAPTER TWO:

COVERAGE, CONCEPTS AND DEFINITIONS FOR 1st CENSUS OF SPRINGS

2.0 GENERAL

2.0.1 1st Census of Springs 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 1st Census of Springs is the complete enumeration of all springs located withing the geographical boundaries of the country. The census will also cover those springs which dried-up in the recent time (within 5-10 years). In such situation enumerator/BLO must ensure with the valid evidence such as photo showing the extant of the structure of the dried spring.

2.0.3 The reference year for 1st Census of Springs 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 the prescribed schedule of the 1st Census of Springs.

2.0.4 The 1st Census of Springs 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. Springs located in the forest shall be taken in the nearest village/ward. The Census will be using Local Government Directory (LGD) codes to list all administrative units across the country.

Scope & Coverage

2.0.5 The 1st Census of Springs 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 of the Census

2.0.6 The 1st Census of Springs 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).

2.0.7 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.

2.0.8 The census is 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 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.

2.0.9 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.**

2.1 DEFINITION OF SPRING TO BE USED:

2.1.1 A spring is a focused discharge of naturally occurring groundwater on the Earth's surface. In general springs can be seen either as a free flow or seep spring.



Fig. 2.1 Free flow spring



Fig. 2.2 Seep Spring

For spring census, following conditions need to be considered during springs mapping,

2.1.2 Not all naturally occurring groundwater flows with diffuse discharge can be classified as springs. For example:

- **Seepage:** *This refers to cases where a discrete discharge point cannot be determined, such as the oozing of groundwater from the banks of a river, lake, or stream, resulting in the creation of a wet and marshy area.*



Fig. 2.3 Water logging due to discreate discharge (seepage, not spring)

- **Wetlands:** *In areas where the water table is near the surface, groundwater discharges diffusely, giving rise to swampy or marshy ecosystems that support unique plant and animal life.*



Fig. 2.4 Swampy wetland (not spring)

(1) Spring census should not include ponds and artificial situations, viz. dug wells, artesian wells, and groundwater that appears in excavations.

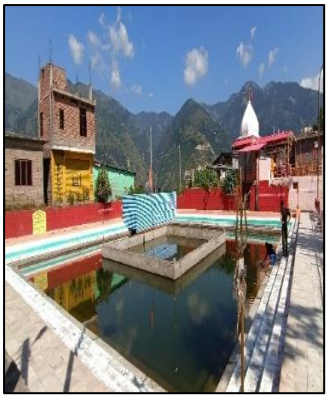




Fig. 2.5 Pond (not spring) **Fig. 2.6** Dug well (not spring) **Fig. 2.7** Artesian well (not spring)

2.1.3 Natural springs that have pipes installed at their outlets to direct/guide their flow should be included in the mapping of springs and should not be mistaken for piped water supplies.





Fig. 2.8 Springs with piped outlet

However, the following should be excluded:

- Pipes connected to artificial tanks and pumping schemes.
- Pipes drawing water from adjoining or nearby streams, rivulets, or nallahs.

Note: *It is advised the enumerator to verify that water coming in pipes must be suddenly oozing from the ground and the role of pipe is just only guide the oozing water.*

2.1.4 In addition to free-flowing springs, which are characterized by concentrated flow, there are small and localized groundwater seeps that occur through permeable sediments or fractures in rock, resulting in the formation of pools of water known by different names in local areas, viz. ***Naula*** in Uttarkhand, ***Baowli*** in Himachal Pradesh, and ***Bowli/Baowri*** in Jammu & Kashmir should also be covered in the spring census. It is important not to confuse these with other larger structures like step wells during spring mapping (e.g., Agrasen Ki Baoli in New Delhi, Rani ki Vav in Gujarat, etc.).

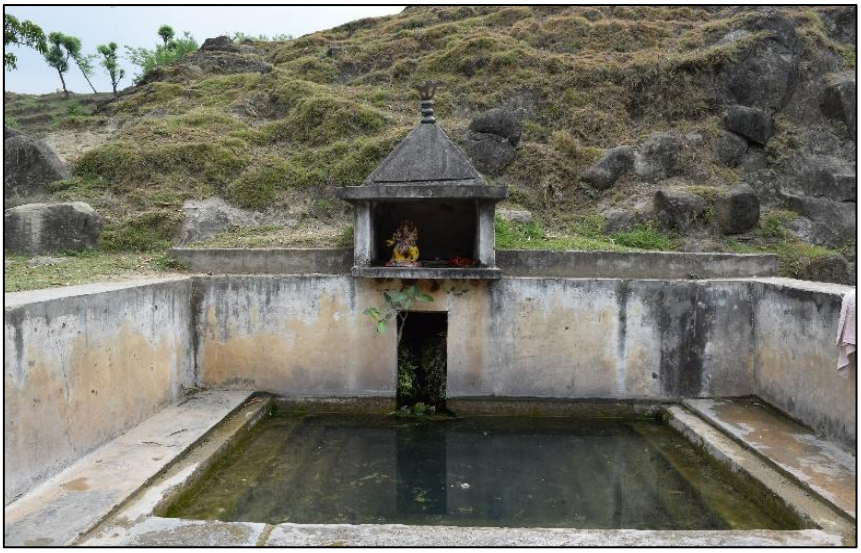


Fig. 2.9 Bowli/Baowri in Udhampur district of J&K

2.2 LOCAL NOMENCLATURE OF SPRINGS ACROSS DIFFERENT STATES OF INDIA

2.2.1 There exists a notable variation in the local nomenclature used to refer to springs across different regions of India. Consequently, it is advisable to incorporate the specific vernacular designations utilized by the local populace when conducting spring mapping exercises. A 'non-exhaustive' list of popular nomenclatures for springs in different regions of India is provided below:

Table 2.1 Local nomenclature of springs across different states of India

S. No.	State	Local nomenclature of spring
1	Arunachal Pradesh	Hikur by the people of Adi tribe, and Sadang by the Nyishi tribe
2	Assam	Uuh
3	Himachal Pradesh	Panihar, Nadu, Baori, Chharedu
4	Jammu and Kashmir	Chasma, Naag, Baowli
5	Karnataka	Neerina bugge, Karanji neeru, Oravu
6	Kerala	Jaladhara, Oat vellum
7	Ladhakh	Chhumik
8	Maharastra	Jara or Zara
9	Manipuri	Ephut by Meitei people

10	Meghalaya	Chimik by Garo tribes
11	Mizoram	Sih
12	Nagaland	Dzuluo in Kohima area, Azukikhi in Zunheboto area, Dzuri in Phek area, and Tchulan in Wokha area
13	Sikkim	Dhara, Umrey ko Pani (Nepali)
14	Tripura	Hathai-ni by the indigenous people, and Jharna by Bengali people
15	Uttarakhand	Naula, Panera in Kumaon region, and Dhara, Panera in Garhwal region

2.2.2 A detailed list showing which entity should be "Accepted as Spring" and "Rejected as Springs" is provided in **Annexure-II** to help enumerators in mapping the actual springs.

*****

CHAPTER THREE:

METHODOLOGY FOR CONDUCTING 1ST SPRING CENSUS

3.0 METHODOLOGY:

3.0.1 The 1st Census of Springs 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.

3.0.2 There will be a provision for creation of multiple user IDs for a Block/Sub district. 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/ She 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 maximum two user IDs for the block, however it is up to DLO that either he/she wants to create multiple IDs for a block or sub-district or go with single user ID. This way the creation of block level user ID shall be done on multiple of 50 villages.

3.0.3 The enumerator will begin by surveying all springs by the village. Spring located in the forest will be entered under the nearest village. 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 scrutiny will be carried out digitally, validation will take place on an online portal developed by NIH and NIC. The data should be collected within 6 months by the respective States/UTs before undergoing further examination at the Central level.

3.0.4 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

3.0.5 State and Central team would also visit the State and check the quality of field work.

3.1 Implementation Guidelines:

3.1.1 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 Department 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 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.

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

3.1.3 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.

3.2 Process Flow

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

3.2.2 **State Level**

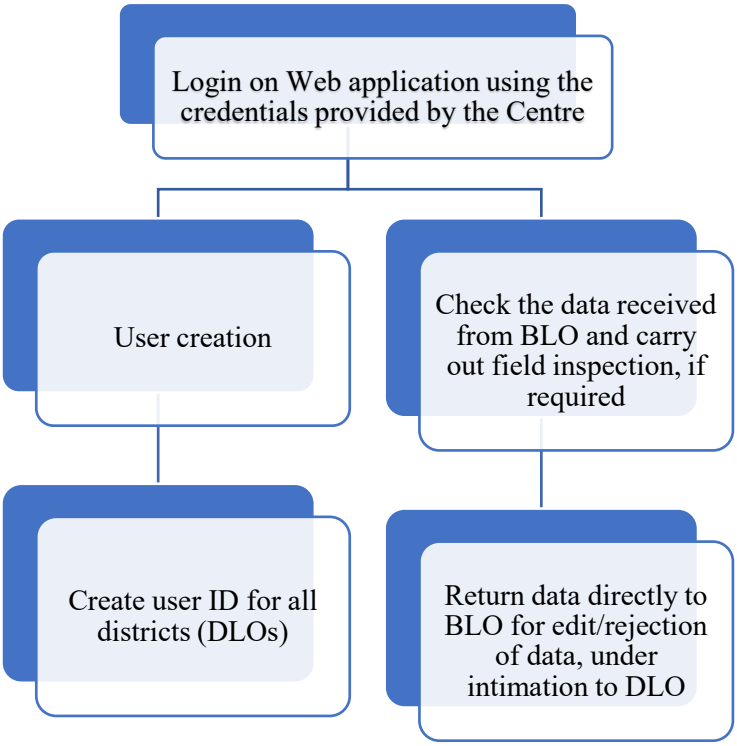
While login into the web application by State Level Officer, one time authentication has to be done with the help of OTP received on the email and mobile number.

3.2.2.1 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.

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

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

3.2.2.4 SLO Level Process Flow is given below:



3.2.3 **District level**

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

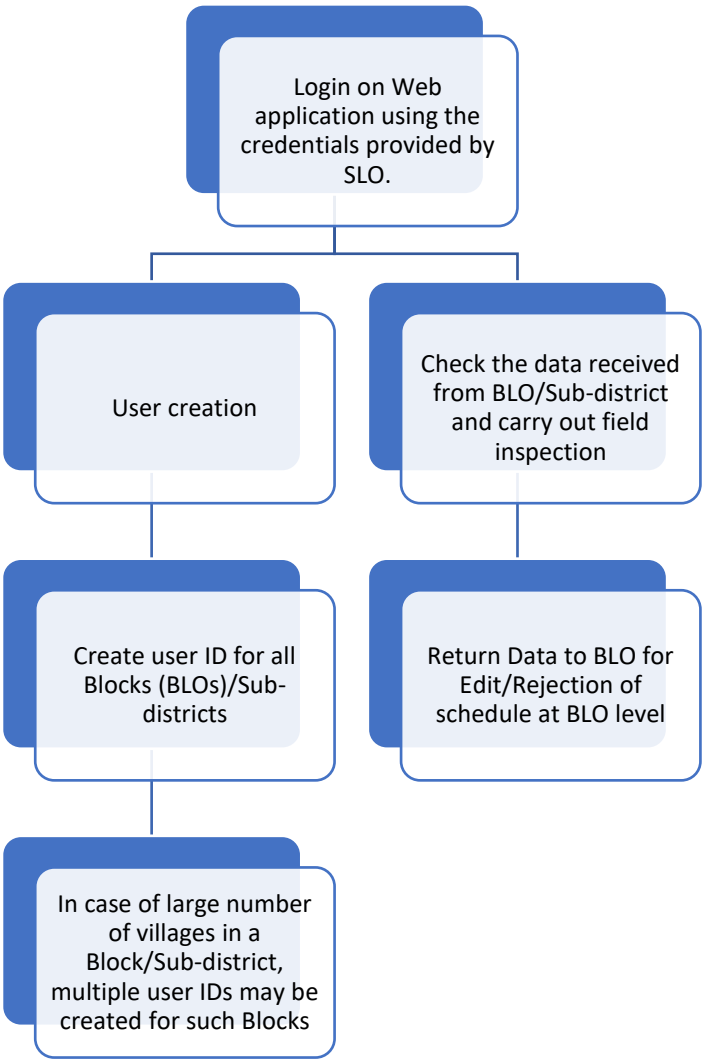
3.2.3.1 District Level Officer has to assign officers for each Block/Sub-district before user creation on web application of the Census. While user creation on the web application, email and mobile number of the official for whom the Block/Sub-District login ID is created has to be entered.

3.2.3.2 DLO may either create one user ID for a block/sub-district or more than one user ID for the same block/sub-district, 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.

3.2.3.3 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.

3.2.3.4 DLO Level Process Flow is given below:



3.2.4 **Block Level**

While login into the web application by BLO with the help of user ID and password provided by DLO, 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)

3.2.4.1 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.

3.2.4.2 BLO must ensure that no springs have been left in any village of their block. As springs are generally found in hilly topography, BLO will be required to

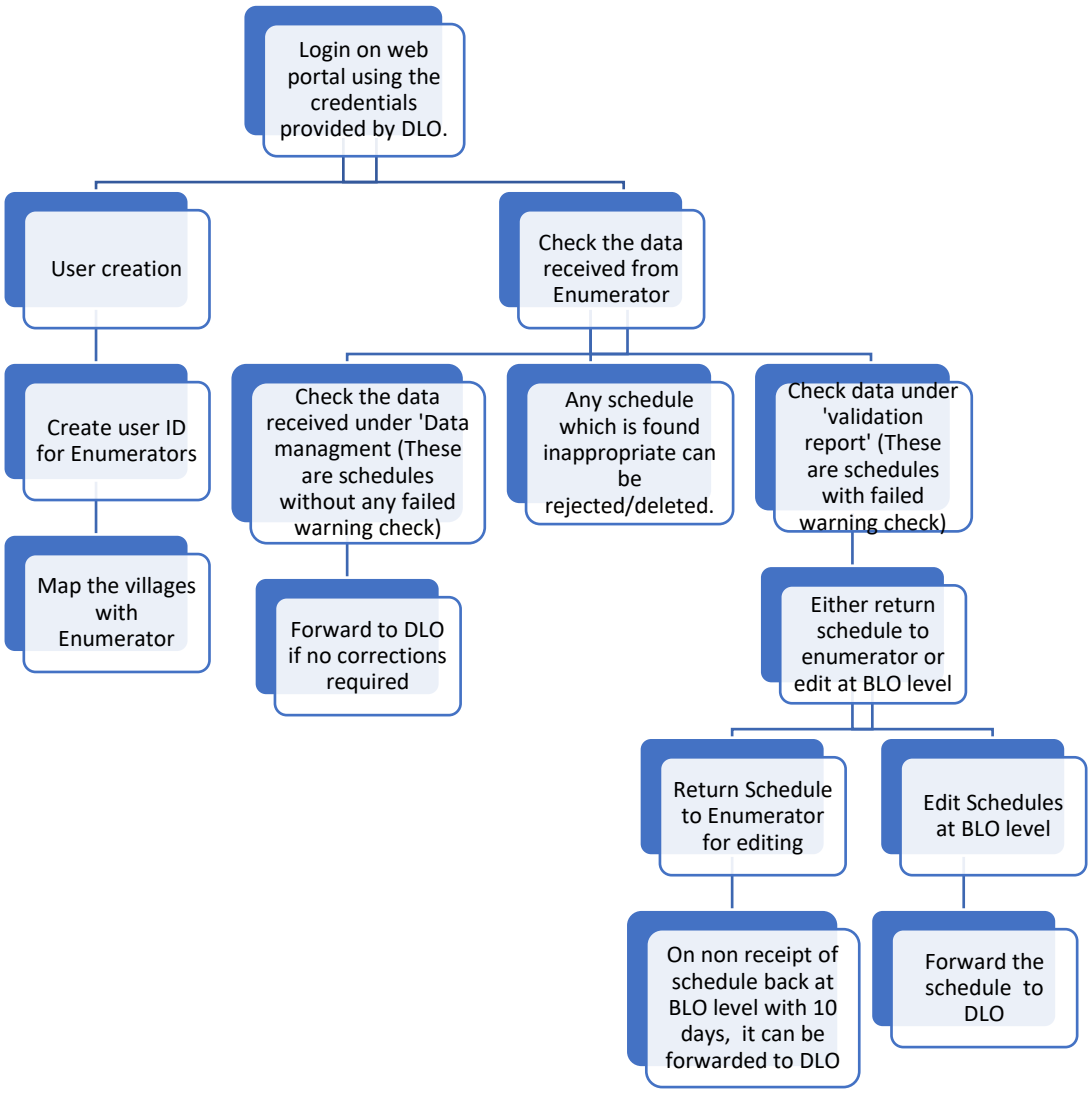
prudently select the village(s) which will be kept in “spring not available” category of that block. However, prior to making such a decision, SLO shall compile such villages/blocks/districts after consulting the local concerned agencies and obtain approval from the State Level Steering Committee/Technical Sub-Committee of the State.

3.2.4.3 Each village or ward will be assigned to a single enumerator in a given time ensuring that no village or ward is assigned to multiple enumerators. But multiple villages or wards may be assigned to a single enumerator. If there is any change of enumerator, then account may be re-assigned to the new enumerator.

3.2.4.4 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.

3.2.4.5 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 if required.

3.2.4.6 BLO/Sub-district Level Process Flow is given below:



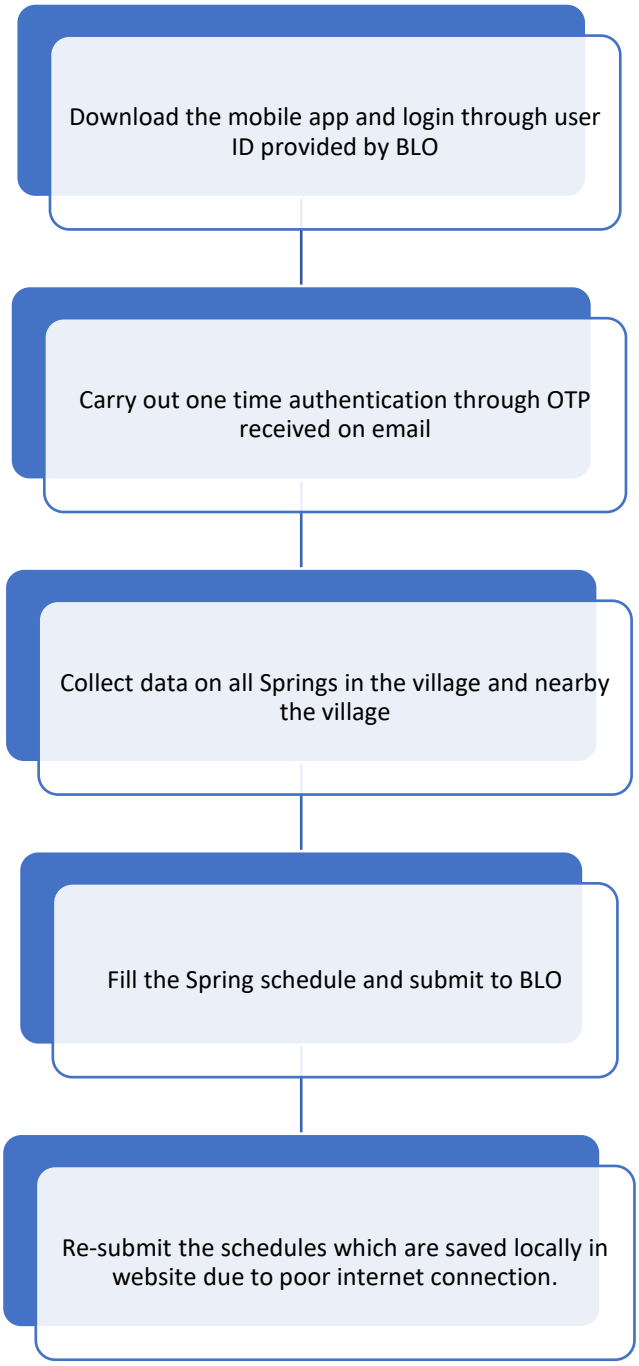
3.2.5 **Enumerator Level**

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

3.2.5.1 Before proceeding for data collection, he must be logged in to the mobile application, which requires a network connection.

3.2.5.2 The enumerator should visit and cover all his/her jurisdiction area to ensure complete coverage. He/she should also interact with village officials /knowledgeable people/ water user associations/ local residents to correctly enter the relevant fields of the schedule. The purpose of the Census should be explained to the local users/ residents to win over their confidence in obtaining the specific information. After filling up the schedules in the mobile application, the enumerators are required to submit the completed schedules to the supervisor for scrutiny.

3.2.5.3 Enumerator Level Process Flow is given below:



3.3 FIELD WORK

3.3.1 The 1st Spring 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 (SNO).

3.3.2 The primary work of collection of data will be carried out by the enumerators both in rural and urban areas.

3.3.3 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, local people and Patwaris for identifying all springs within/nearby the village.

3.3.4 The primary enumerator should also find out from village officials / knowledgeable people / water use association to identify the springs within or nearby the villages allocated him for conducting the census.

3.4 Scrutiny:

3.4.1 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.

3.4.1.1 **At BLO level:** BLO can forward the village schedules which are not having any failed warning checks to DLO. The block level officer will visit at least 10% or 50 springs, whichever is maximum, to ensure the correctness of data collected. While doing so it is to be ensured that springs are not clustered and are spread at substantial far distance. It is advised to the supervisor to thoroughly review all the submitted schedules by the enumerator and prudently scrutinize the springs which have to be verified through field visit.

3.4.1.2 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. 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 DLO’.

3.4.1.3 **At DLO level:** At least 10% of the total springs or 50 schedules, whichever is maximum, spread across all the blocks of the district shall be prudently scrutinized by the district level officer.

3.4.1.4 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. 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.

3.5 Progress Monitoring

3.5.1 The progress of 1st Census of Springs 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.

3.5.2 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 SNO 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 State and Districts/Blocks/Villages within those States.

3.6 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

*****

CHAPTER FOUR:

INSTRUCTIONS FOR USING THE USER MANAGEMENT WEB APPLICATION AND MOBILE APPLICATION

4.1 LOGIN ACCOUNT ROLES AND FEATURES

The system includes four distinct login accounts (Admin, State, District and Block) with role-based access for user management web application. Below is a detailed breakdown of each login account and its corresponding features and responsibilities:

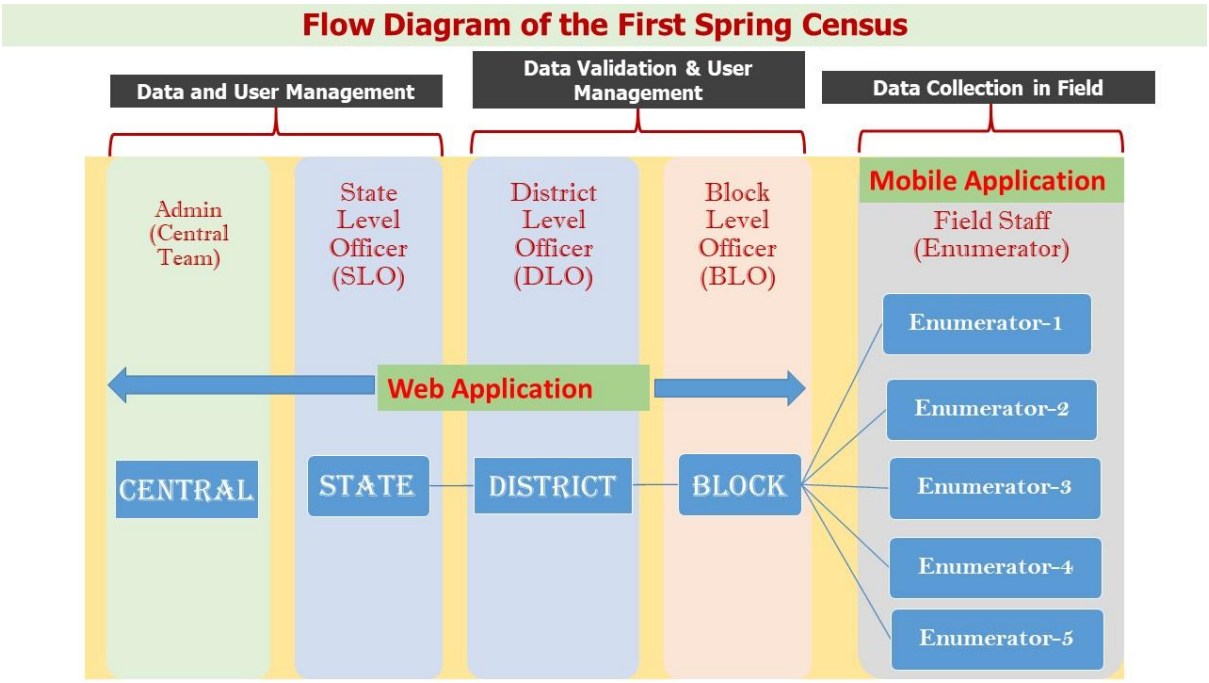


Fig. 4.1 Flow diagram showing the data and user management (Admin, SLO, DLO, and BLO) through web application and field work by the enumerator through mobile application.

A. Admin Account:

- **Role**: Main role of "Admin Account" is to create the "State Users" for all States/UTs of the country. Additionally, "Admin Account" has full system access and to be handled by the central team.
- **Features**:
  - **Data Management**:
    - Access all census data across all regions.
    - Export enumerator data and reports in Excel or PDF formats.
  - **Filter and Search**:
    - Apply filters by state, district, block, urban/rural, and enumerator name.
  - **Dashboard**:
    - View consolidated statistics, such as total schedules conducted and active enumerators.
  - **Account Management**:
    - Create and manage login accounts for state.

B. State Account:

- **Role**: Main role of the State User is to create the login credential for all District Users in the state. Additionally, State User has right to oversees census operations to be conducted with in the state by the enumerators.
- **Features**:
    - **Data Access**:
        - Access census data for all districts within the state.
    - **Filter and Search**:
        - Search enumerator details by district, urban/rural, and enumerator name.
    - **Dashboard**:
        - View state-level statistics, such as the number of schedules conducted and active enumerators.

C. District Account:

- **Role**: Main role of the District User is to create the Block, Sub District Users for all Blocks/Municipalities falling in their District. Additionally, District User has right to oversees census operations as well as verify them in all Blocks/Municipalities of the District.

- **Features**:
    - **Data Access**:
        - View census data collected in assigned Block/City, sub district or Municipalities within the district, and Revert to Enumerator, if necessary.
    - **Filter and Search**:
        - Filter enumerator details by Block/City or Municipalities and Enumerator Name/Phone number.
    - **Dashboard**:
        - Monitor district-level metrics, such as total schedules conducted.

D. Block/City and Sub District Account:

- **Role:** The primary role of the Block/City or Sub-District User is to add the "Enumerator" for the assigned Villages and Wards.
- **Block/City and Sub-District Users:** Have the authority to add Enumerators, oversee census operations, and verify collected data within their assigned areas.
- **Enumerator:** Responsible for collecting census data within the designated Village or Ward and submitting it for verification.

- **Features:**
    - **Enumerator Management:**

- View and manage enumerators assigned to the Block/City.

- **Data Access:**
  - Access and edit census data for the assigned Villages and Wards.
- **Filter and Search:**
  - Search for enumerator details by Enumerator Name.
- **Dashboard:**
  - Monitor census activities and performance at the block level.

4.2 ACCESS AND USE THE USER MANAGEMENT DASHBOARD

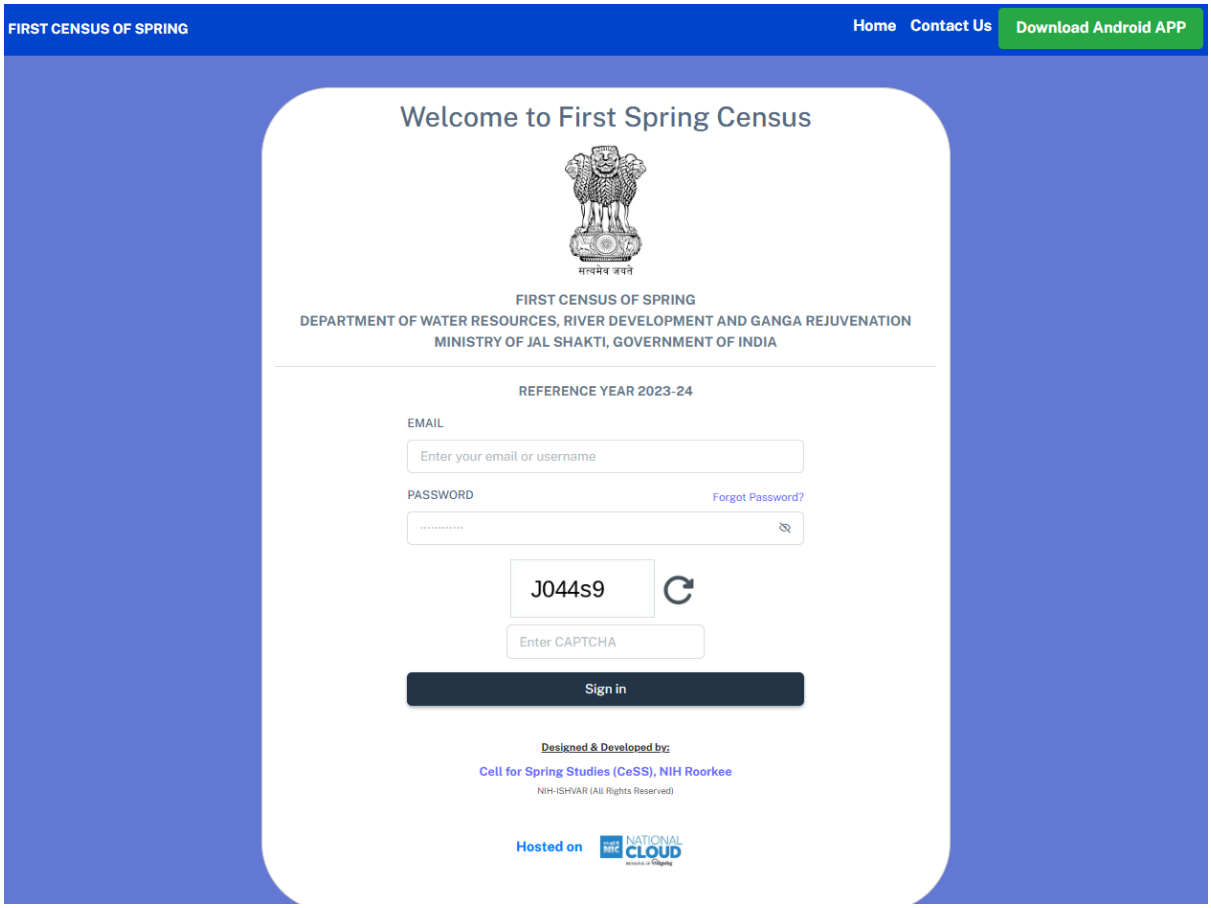
A. Admin Account

URL: https://wrcensus-spring.mowr.gov.in/

Once the URL entered in the Web Browser, the following page will be displayed:



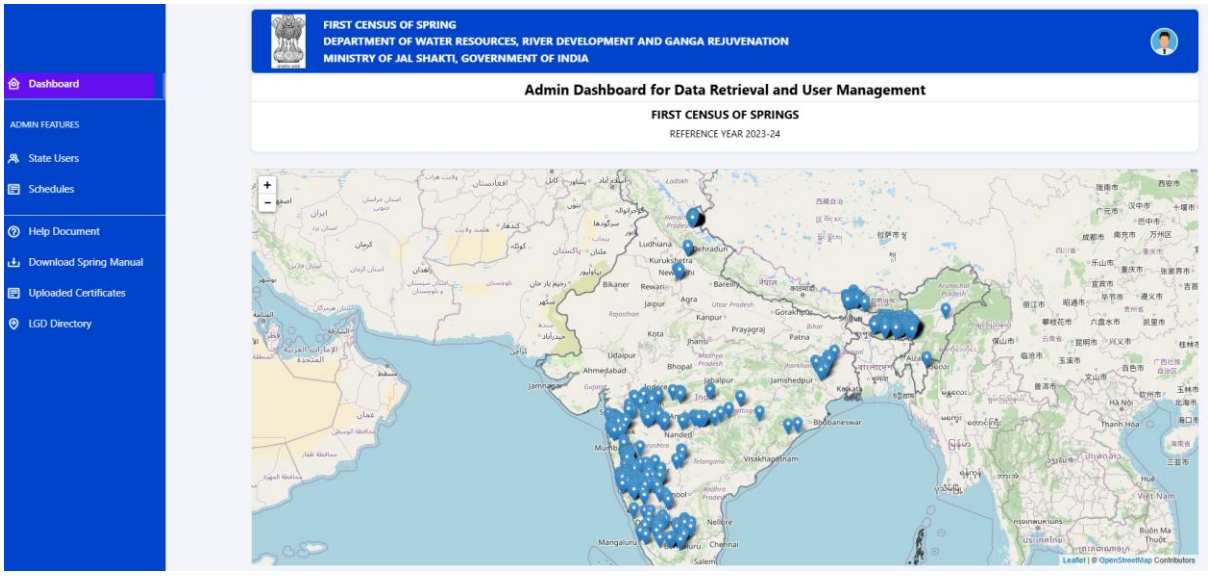
On clicking on "SPRING CENSUS" the following page will be displayed

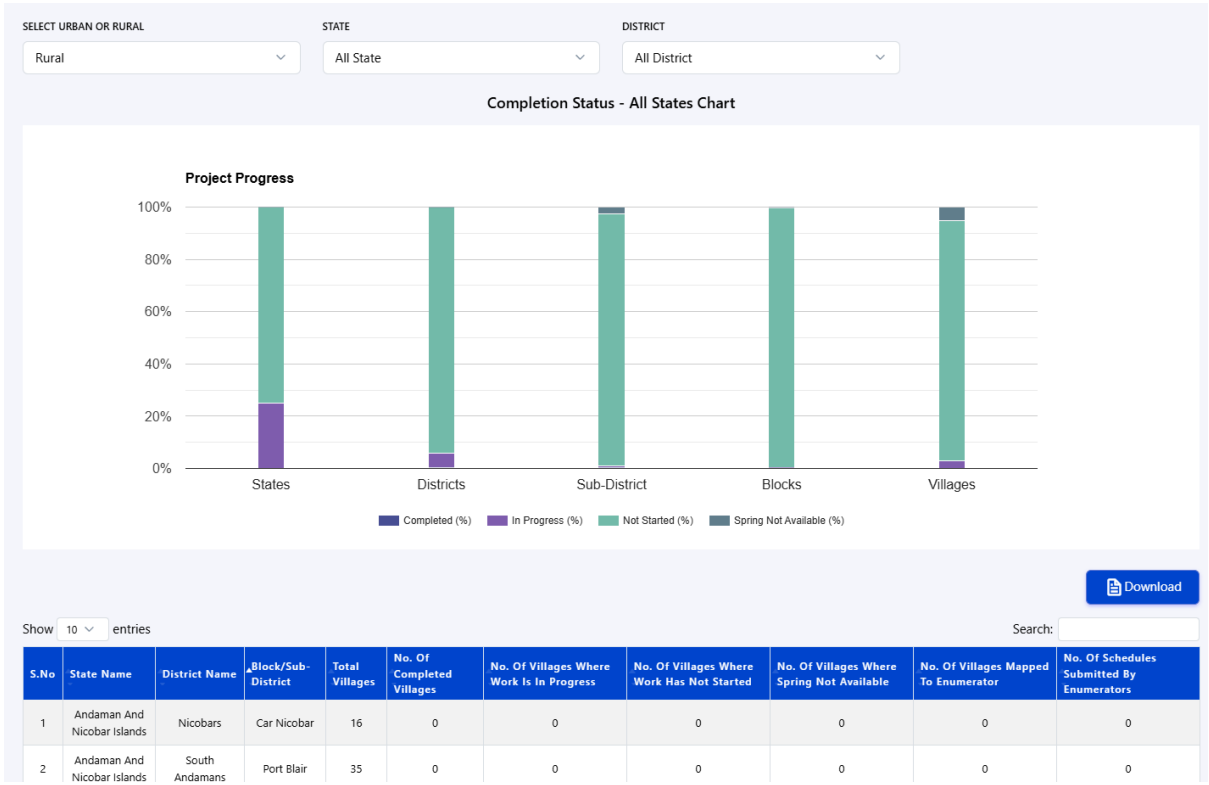


User filled Email and password of the **ADMIN ACCOUNT** in the respective field.

Admin Account Features Highlighted in the Portal:

1. **Dashboard**
   - This is the First Spring Census monitoring dashboard that displays Spring Census data for different villages or wards across different states in the country based on various filters (**Urban & Rural, State, District, Block**) in stack charts (**Completed, In Progress, Not Started, Spring Not Available**) and in detailed tables.
   - Displays a map for geographic reference and summary statistics, such as number of **Approved** mapped schedules in each state.

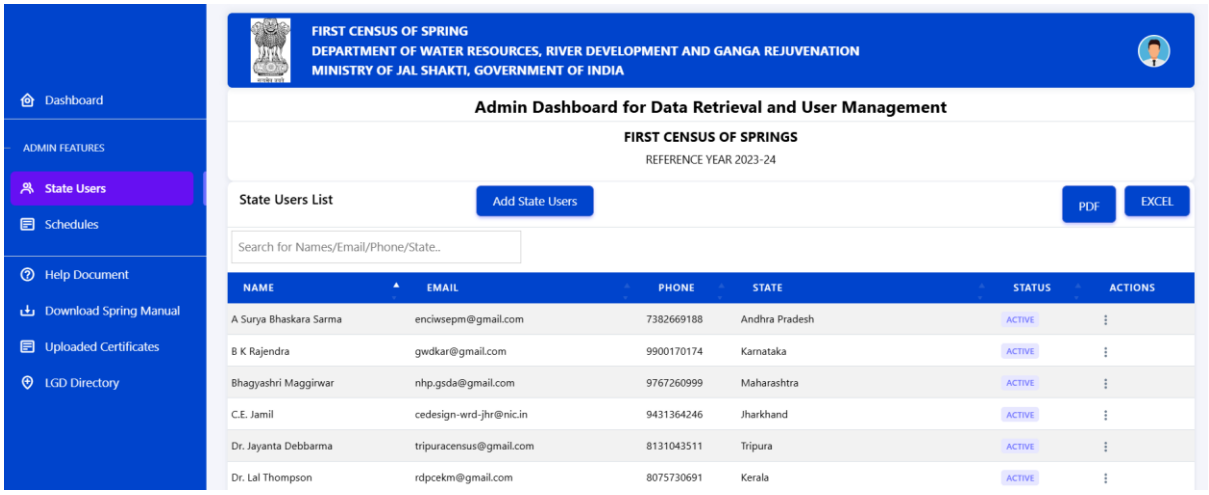




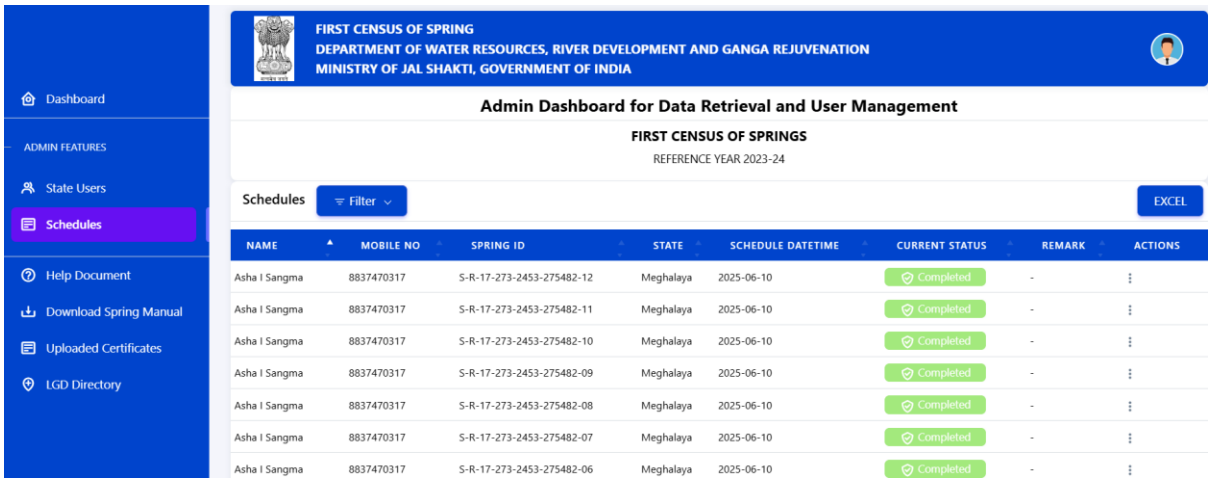
S.No	State Name	District Name	Block/Sub-District	Total Villages	No. Of Completed Villages	No. Of Villages Where Work Is In Progress	No. Of Villages Where Work Has Not Started	No. Of Villages Where Spring Not Available	No. Of Villages Mapped To Enumerator	No. Of Schedules Submitted By Enumerators
1	Andaman And Nicobar Islands	Nicobars	Car Nicobar	16	0	0	0	0	0	0
2	Andaman And Nicobar Islands	South Andamans	Port Blair	35	0	0	0	0	0	0

2. State Users

- Allows admins to manage users at the state level. Admins can add state users (**Add State Users**) and **Edit** and **Delete** them under the **Actions** tab.



3. **Schedules**
   - A summary table (**Name, Mobile Number, Spring ID, State, Schedule Date Time, Current Status, Actions**) displaying all the approved spring schedules in various states.



   - Clicking **View** under the **Actions** tab displays detailed spring schedule information, including:
     - Identification Particulars
     - Spring Description
     - General Physical Characteristics of the Spring
     - Other information
   - The **Filter** tab allows the admin to limit the results based on criteria such as **State, District, Urban and Rural, Enumerator Name, Mobile Number.**

4. **Help Document:**
   - A guide for admin users is available.

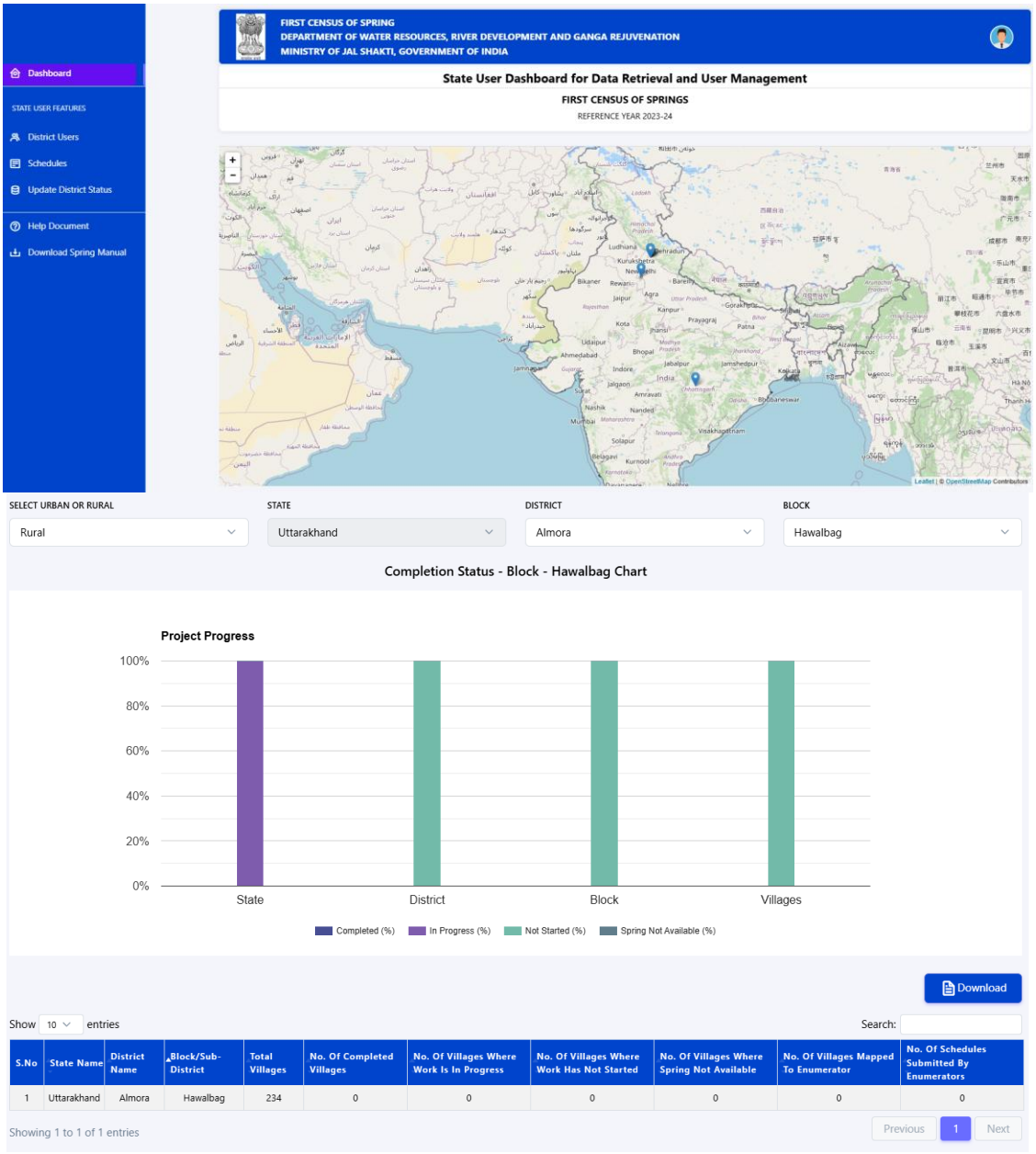
5. **Download Sprin Manual:**
   - Download the instruction manual for the First Census of spring.

B. State Account

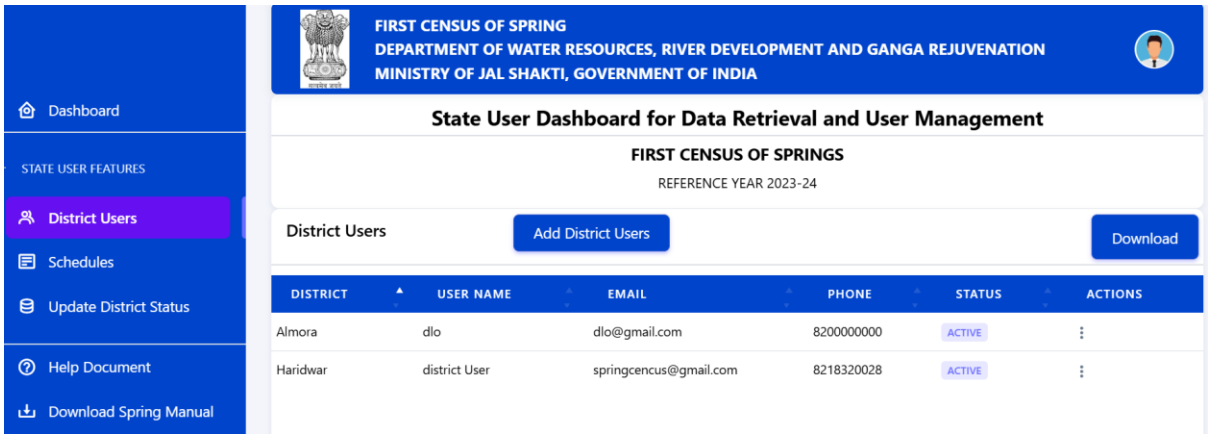
State Users (State Level Officers) can access their State Dashboard using login credentials created by Admin for their respective States.

1. Dashboard

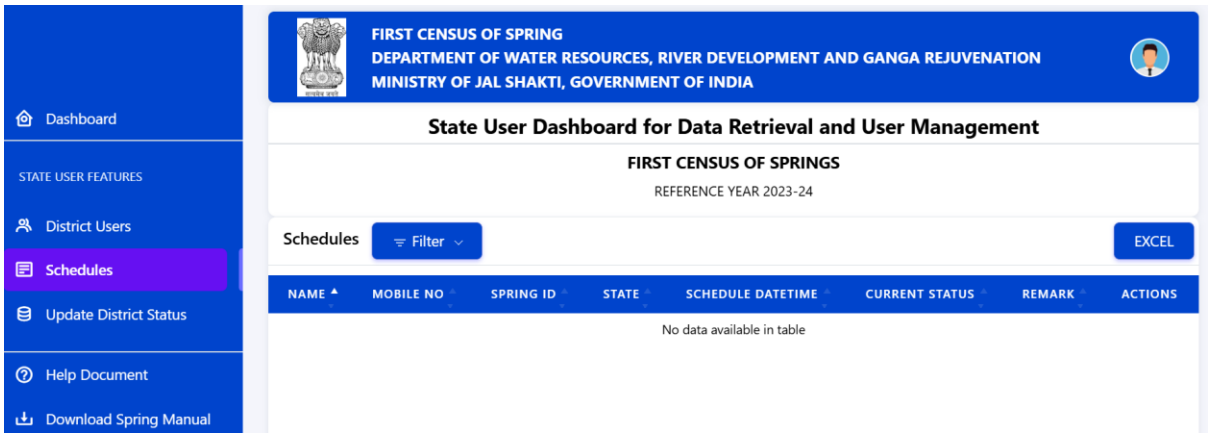
- This is the First Spring Census monitoring dashboard which displays the Spring Census data for different villages or wards of the state based on various **Filters** (**Urban & Rural, State, District, Block**) in stake charts (**Completed, In Progress, Not Started, Spring Not Available**) and in detailed tabular form.



2. **District Users**
    - State users can **Add District** users under their jurisdiction and can also **Edit** and **Delete** under **Actions** tab.
    - Ensuring smooth operations for spring schedule planning and execution within the State.

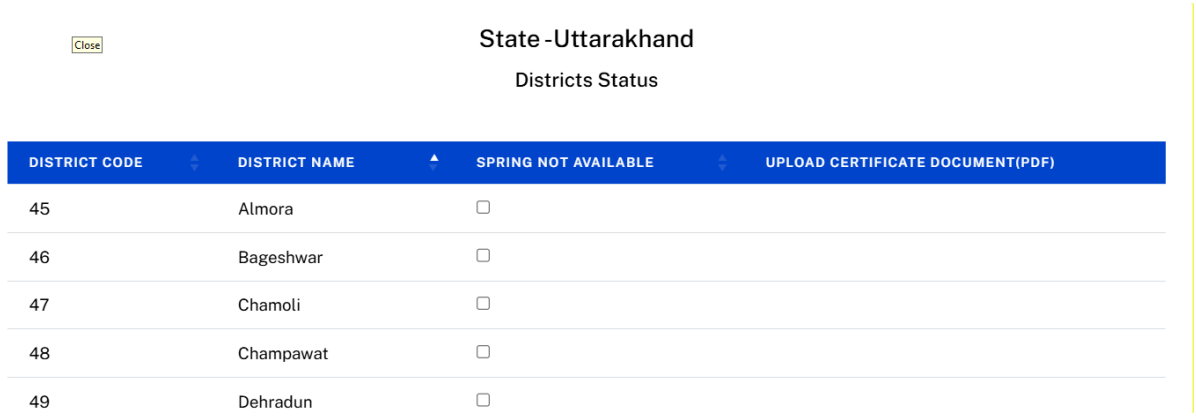


3. **Schedules:**
    - A summary table (**Name, Mobile Number, Spring ID, State, Schedule Date Time, Current Status, Actions**) displays the total number of spring schedules filled in the state.
    - Clicking **View** under the **Actions** tab displays detailed spring schedule information, including:
        - Identification Particulars
        - Spring Description
        - General Physical Characteristics of the Spring
        - Other information
    - **Filters** allow state users to limit results based on criteria such as district or enumerator.
    - Export spring schedule data to **Excel** for reporting or analysis.



4. **Update District Status**

- Updating of district wise "**Spring Not Available**" under State. In case of "**Spring Not Available**", relevant certificate document (**Upload Certificate Document**) has to be uploaded also.



5. **Help Document:**
   - A guide is available for state users.

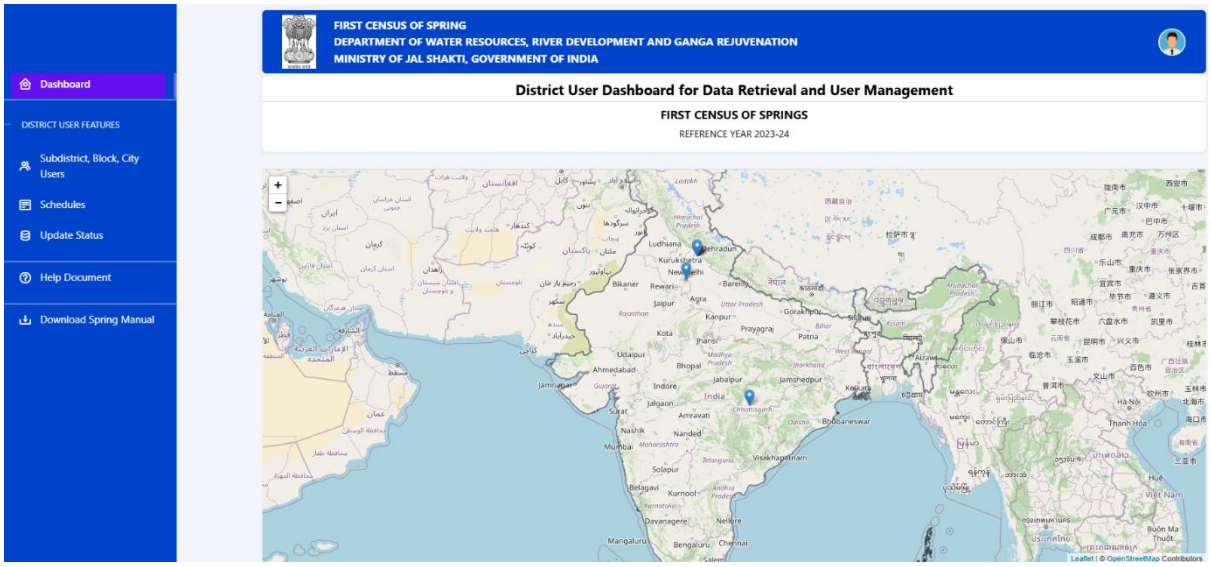
6. **Download Sprin Manual:**
   - Download the instruction manual for the First Census of spring.

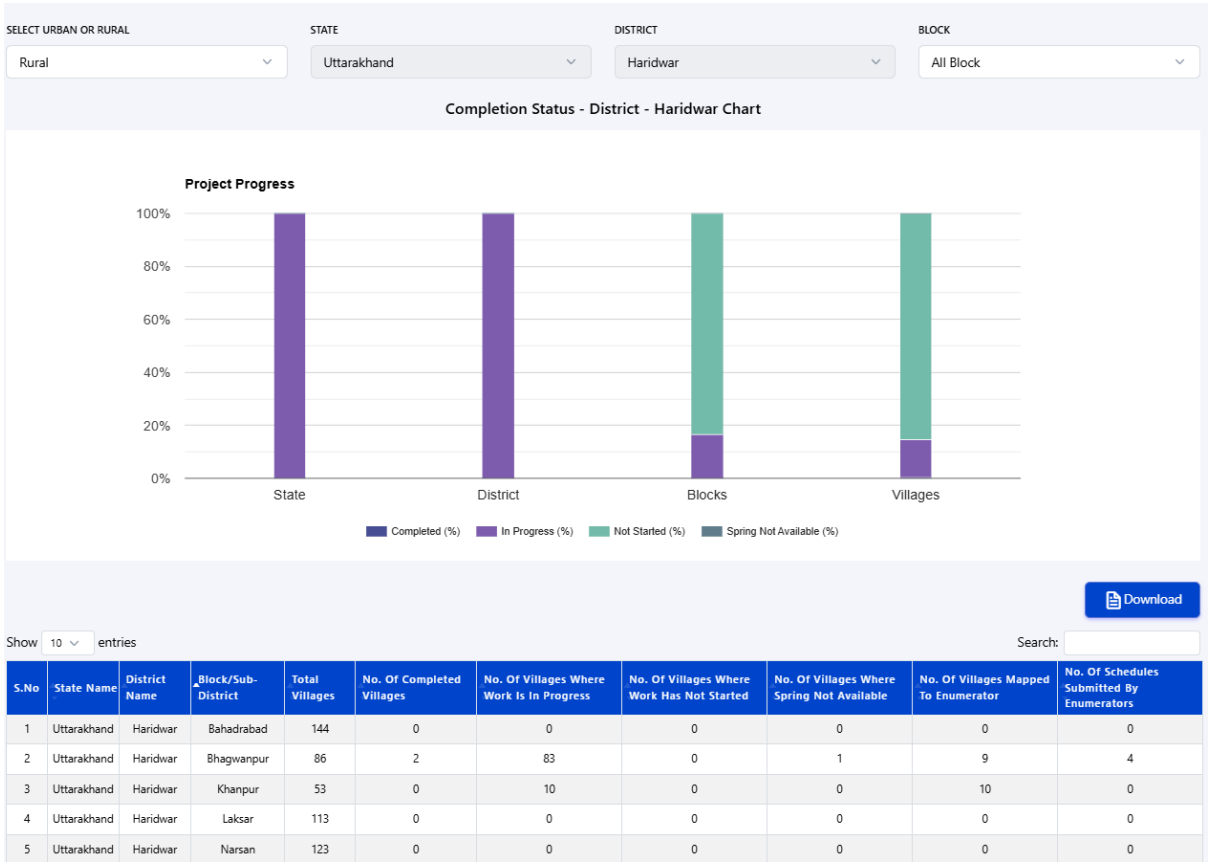
C. District Account

District User (District Level Officer) can access his/her district dashboard using login credentials created by the State Level Officer for his/her district.

1. Dashboard

- This is the First Spring Census monitoring dashboard which displays the Spring Census data for different villages or wards of the district based on various filters (**Urban & Rural, State, District, Block**) in stack charts (**Completed, In Progress, Not Started, Spring Not Available**) and in detailed tabular form.

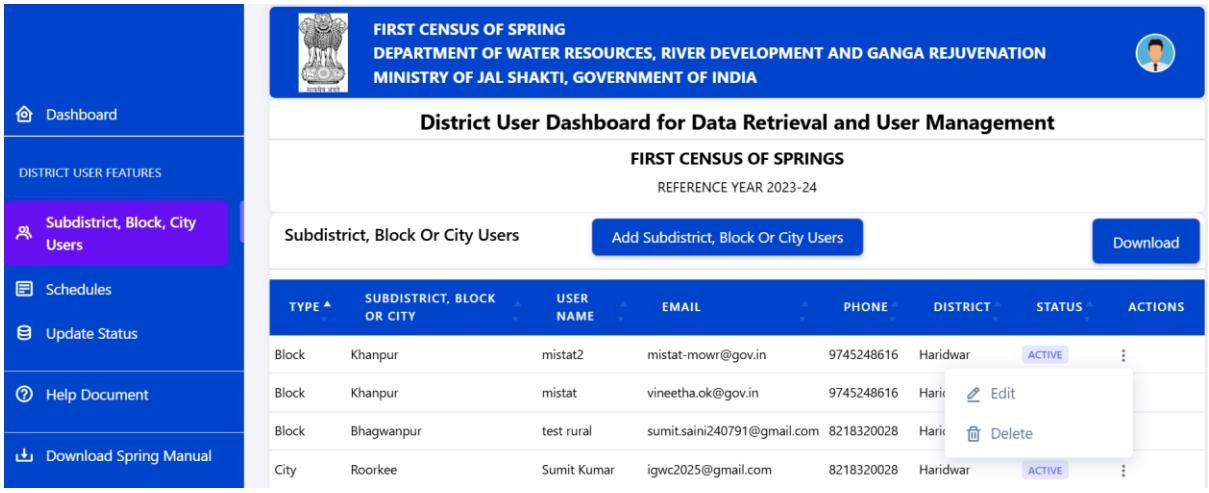




S.No	State Name	District Name	Block/Sub-District	Total Villages	No. Of Completed Villages	No. Of Villages Where Work Is In Progress	No. Of Villages Where Work Has Not Started	No. Of Villages Where Spring Not Available	No. Of Villages Mapped To Enumerator	No. Of Schedules Submitted By Enumerators
1	Uttarakhand	Haridwar	Bahadrabad	144	0	0	0	0	0	0
2	Uttarakhand	Haridwar	Bhagwanpur	86	2	83	0	1	9	4
3	Uttarakhand	Haridwar	Khanpur	53	0	10	0	0	10	0
4	Uttarakhand	Haridwar	Laksar	113	0	0	0	0	0	0
5	Uttarakhand	Haridwar	Narsan	123	0	0	0	0	0	0

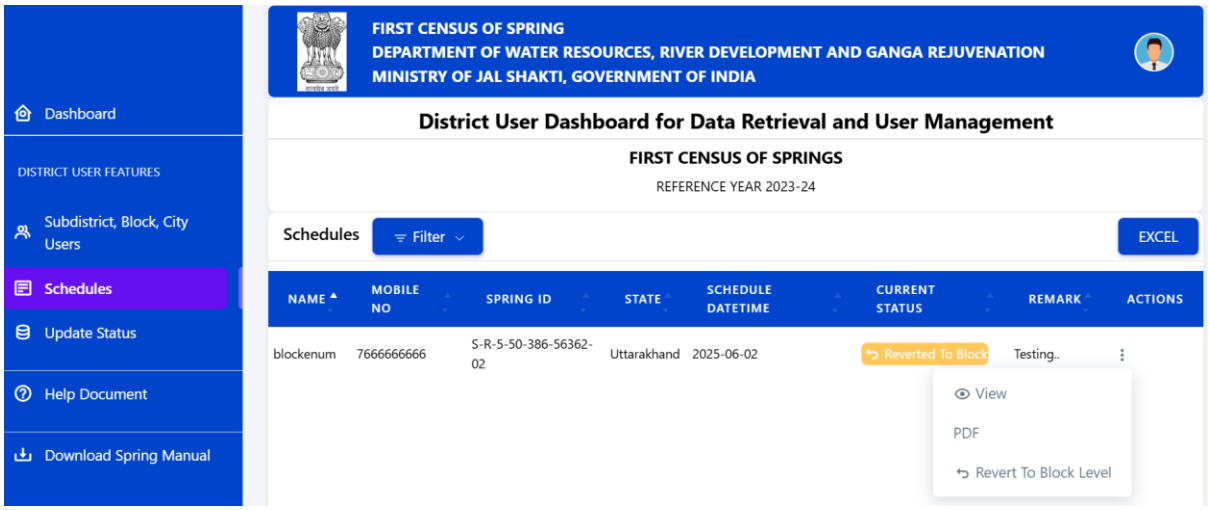
2. Sub-District, Block, City Users

- District Users can **Add Sub-District, Block, City Users** under their jurisdiction and can edit or delete them under Actions tab.
- Ensuring smooth operations within the district for planning and implementation of enumeration.



3. Schedules

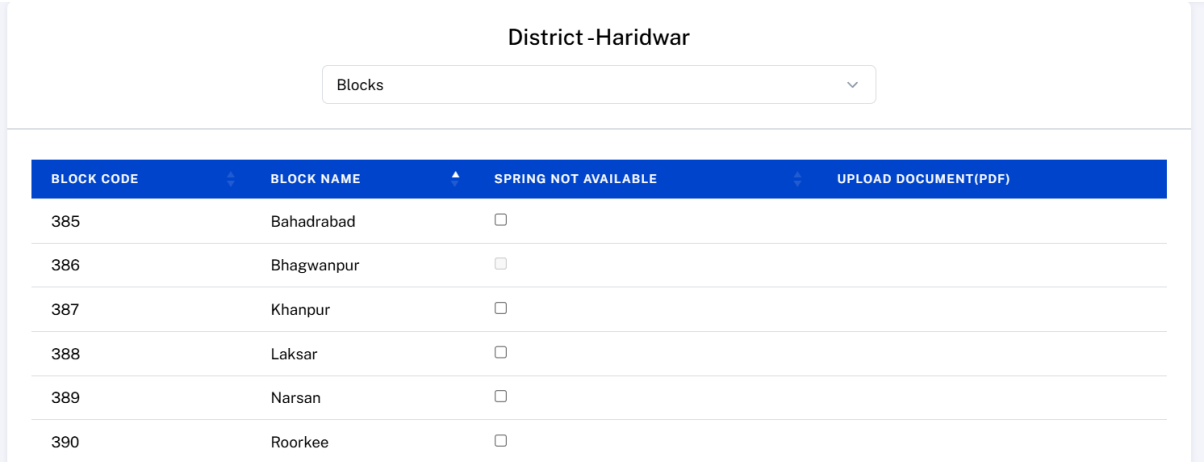
- A summary table **(Name, Mobile Number, Spring ID, State, Schedule Date Time, Current Status, Actions**) displays the total Spring Schedules filled in the district.
- District user can **View** the Spring Schedules filled in his district under **Actions** tab and **Revert to Block/City level** officer if it needs modification or does not meet the required criteria.



- Clicking **View** under the **Actions** tab displays detailed spring schedule information, including:
  - Identification Particulars
  - Spring Description
  - General Physical Characteristics of the Spring
  - Other information
- Filters allow district users to limit results based on criteria such as Block/City and Enumerator Name.
- The filled Spring Schedule data can be exported to Excel for reporting or analysis.

4. Update Status

- Updating of "Spring Not Available" Block/City wise under District. In case of "Spring Not Available", certificate document (Upload Certificate Document) must also be uploaded.



5. **Help Document**
   - A guide for district users is available.

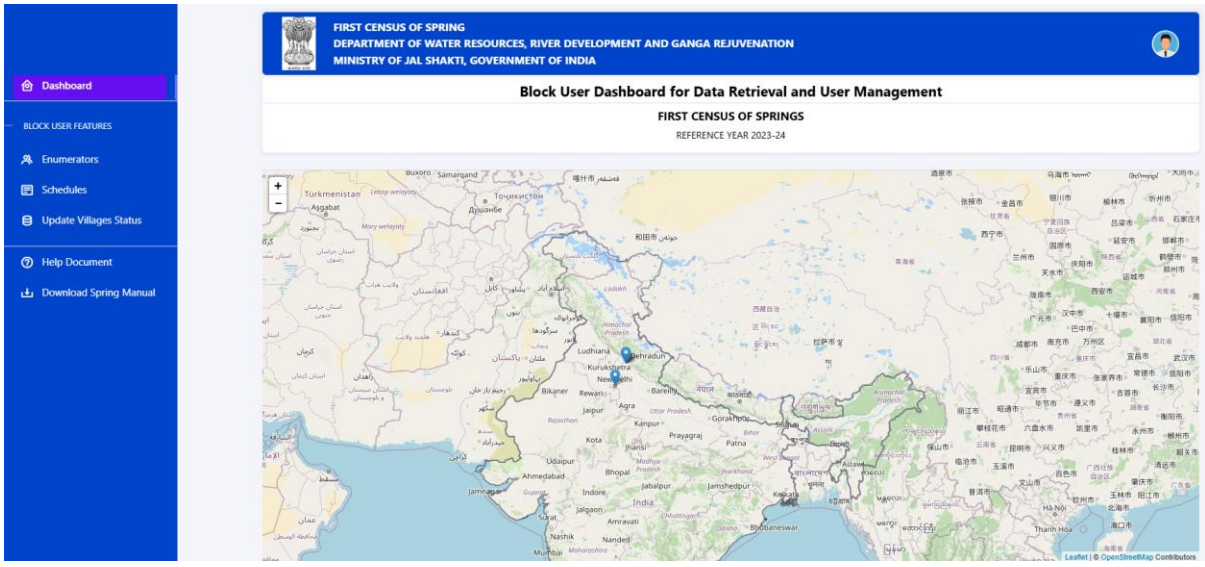
6. **Download Sprin Manual**
   - Download the instruction manual for the First Census of Spring.

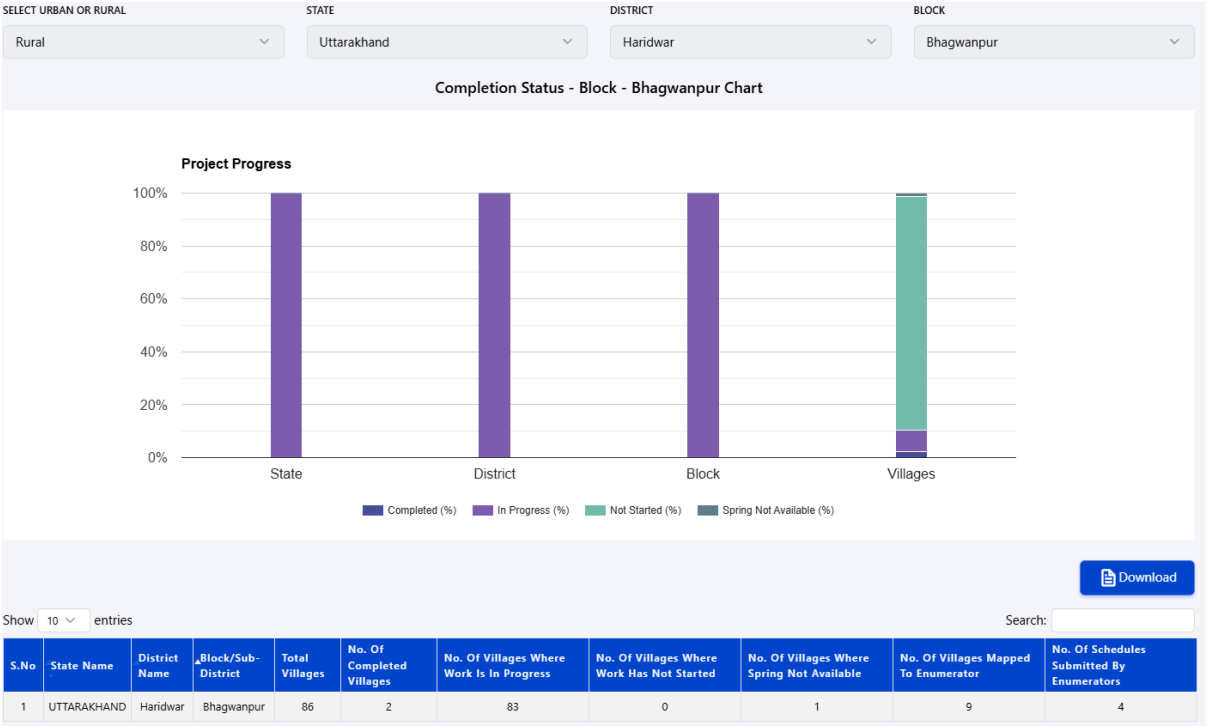
D. Block/City Sub District Account

Block/Sub-district/City users can access their Block/Sub-district/City dashboard using login credentials created by the District Level Officer for their Block/Sub-district/City.

1. Dashboard:

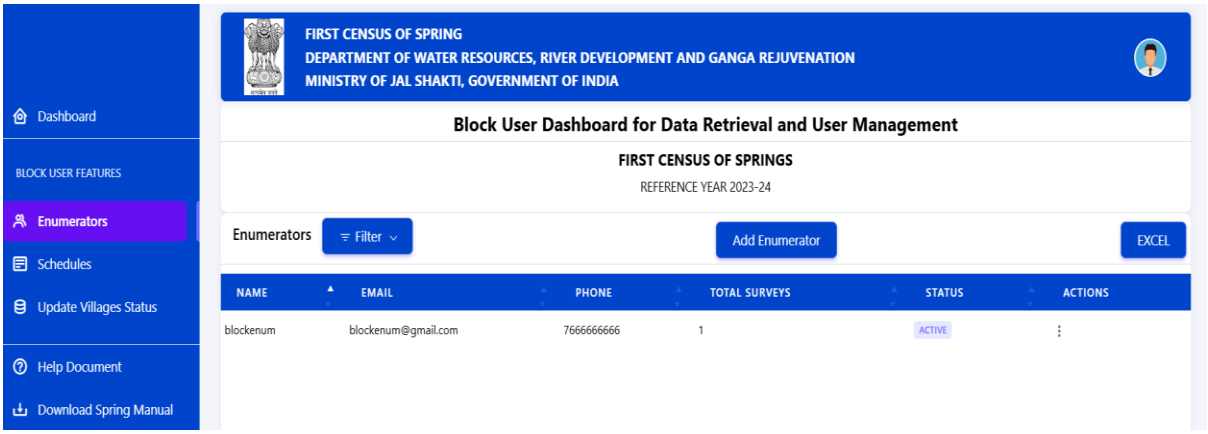
- This is the First Spring Census monitoring dashboard which displays the Spring Census data for different villages or wards of a Block/Sub-District/City based on various filters (**Urban & Rural, District, Block, Village**) in stack charts (**Completed, In Progress, Not Started, Spring Not Available**) and in detailed tabular form.





2. Enumerators

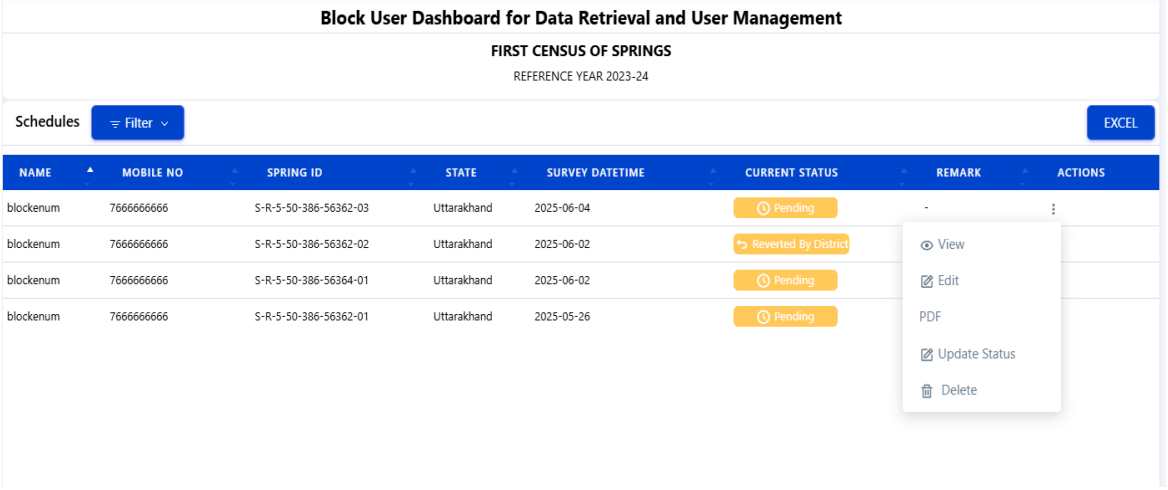
- Block user can **Add, Edit** and **Delete** enumerators for Spring Census under his jurisdiction.
- Can allocate villages or wards to enumerators for survey work.
- Ensures smooth operation within Block/City for Spring Schedule planning and execution.



- Block, Sub-District users can view and manage enumerators assigned to their block.
- The key functionalities are as follows:
  - View enumerator details (e.g., **Name, Email, Phone, Total Schedule, Status, Actions).**
  - Assign enumerators to wards or specific areas.
  - Modify enumerator credentials, such as login information or status.

3. Schedules

- Block/Sub District user can view, edit, update status and delete the Spring Schedules filled under his Block/Sub District.
- Key Features:
  - A summary table displays the total Spring Schedules filled per ward or region.
  - Filter blocks allow users to limit the results based on criteria such as ward or enumerator.
  - Export Spring Schedule data to **Excel** for reporting or analysis.

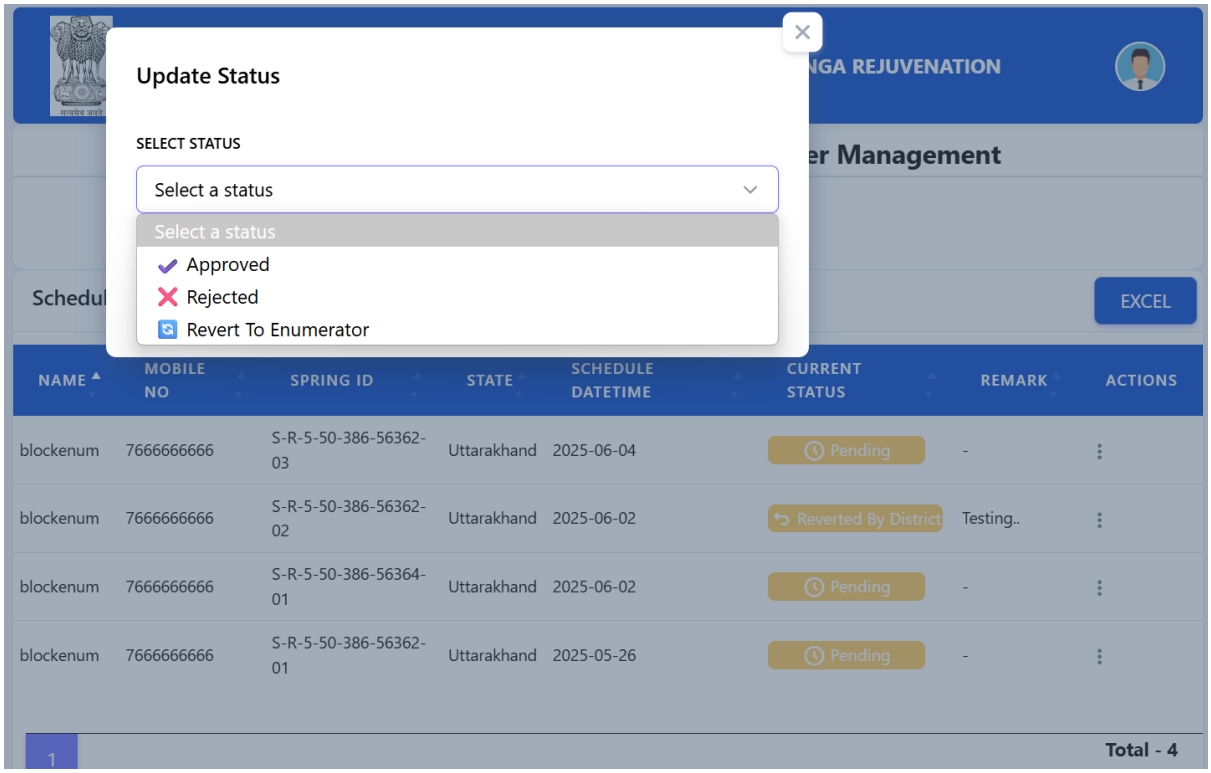


- Under **Update Status**

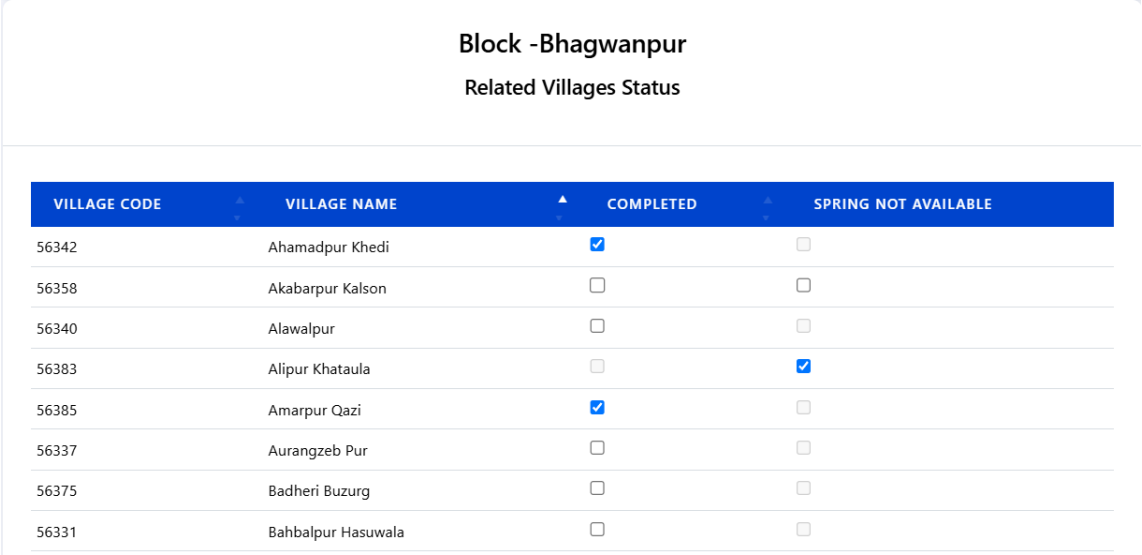
Approved: Spring Schedule is verified and approved.

Rejected: The filled Spring Schedule is not valid or does not meet the required criteria.

Revert to Enumerators: Spring Schedule is sent back to the Enumerators for correction or additional details.



4. **Update Village Status**
   - Update the status of villages under the block as "**Completed**" and "**Spring Not Available**".



Block -Bhagwanpur

Related Villages Status

VILLAGE CODE	VILLAGE NAME	COMPLETED	SPRING NOT AVAILABLE
56342	Ahamadpur Khedi	☑	☐
56358	Akabarpur Kalson	☐	☐
56340	Alawalpur	☐	☐
56383	Alipur Khataula	☐	☑
56385	Amarpur Qazi	☑	☐
56337	Aurangzeb Pur	☐	☐
56375	Badheri Buzurg	☐	☐
56331	Bahbalpur Hasuwala	☐	☐

5. **Help Document**
   - A guide for Block users is available:

6. **Download Sprin Manual**
   - Download the instruction manual for the First Census of spring.

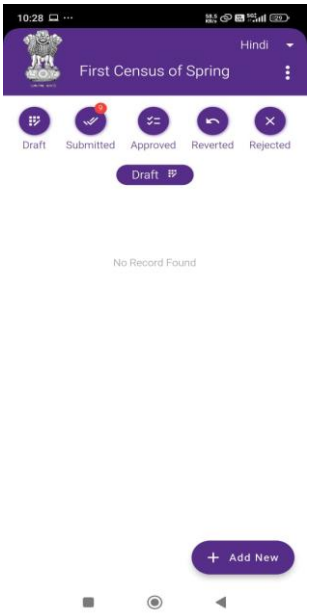
4.3 INSTRUCTIONS FOR INSTALLING MOBILE APP FOR 1ST SPRING CENSUS

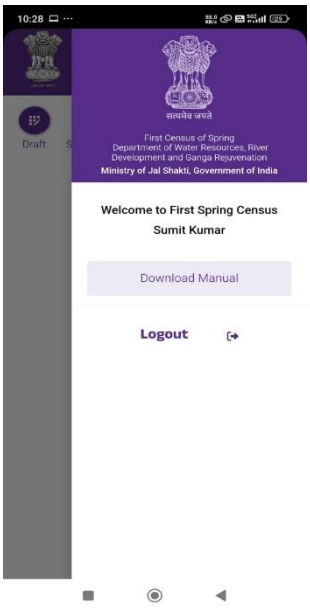
Please follow the steps below to ensure the proper installation and functionality of the updated version of the spring mobile app:

i. **Install the mobile app:** Kindly install the current/updated version of the app in your mobile.
ii. **Login credentials:** Please enter Email id and Password given in the Add enumerator form during the creation of Supervisory Level Officer.



iii. After Login Dashboard of Spring Schedule Form will be open





Here is the detailed explanation of each status showing in the first page of spring schedule:

1. Draft

- When an enumerator (data collector) starts filling out a census schedule but has not yet uploaded it (due to non-availability of mobile network or other reasons), the schedule remains in the **Draft** section.
- This allows the enumerator to **Review and Edit,** the schedule before submitting it.
- Until the schedule is submitted, it will not be available for review by higher authorities.

2. Submitted

- Once the enumerator **Uploads** the schedule successfully, it moves to the **Submitted** status.
- This means that the data has been sent to the system and is now awaiting review.
- The schedule is now locked for further edits by the enumerator, unless it is **Reverted** for corrections.

3. Approved

- If the uploaded schedule is correct and complete, it is reviewed and **approved** by a Block Level Officer**.**
- Approval means that the data has been verified and is considered final for further processing.
- Once approved, no further changes are allowed.

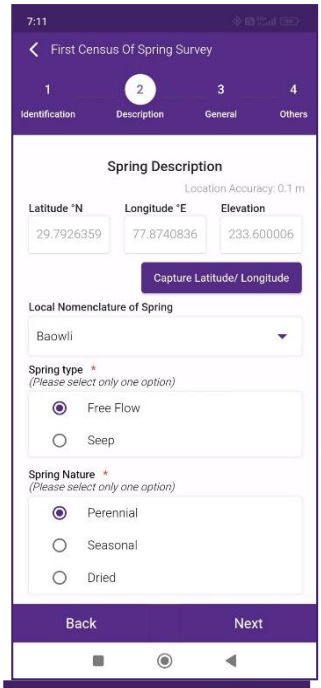
4. Reverted

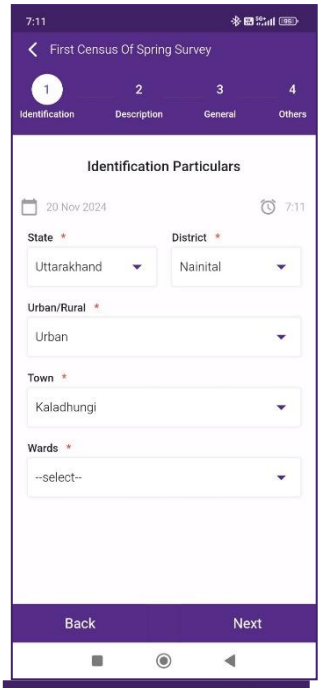
- If there is an error, missing information, or incorrect data, the Block Level Officer or District Level Officer can revert the schedule.
- A reverted schedule is sent back to the enumerator for corrections and re-submission.
- The enumerator must **Edit** the schedule, make the necessary changes, and then re-**submit** it.

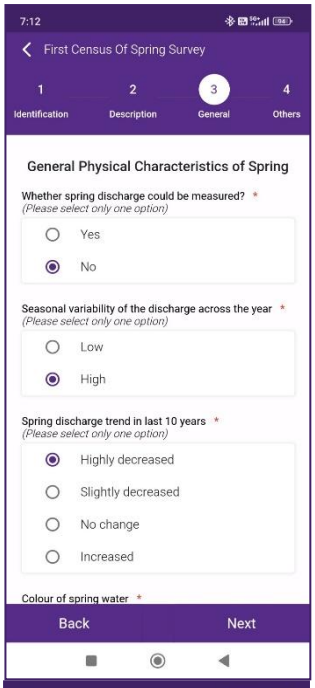
5. Rejected

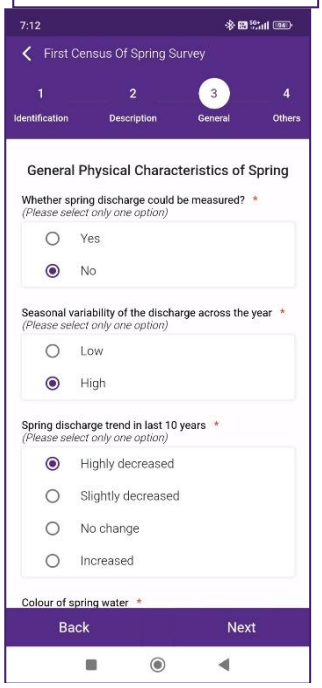
- If the schedule contains major errors or is invalid**,** the Block Level Officer can reject it.
- Once rejected, the schedule is considered invalid and cannot be edited or resubmitted**.**
- The enumerator may need to start a new schedule and re-enter the correct data.

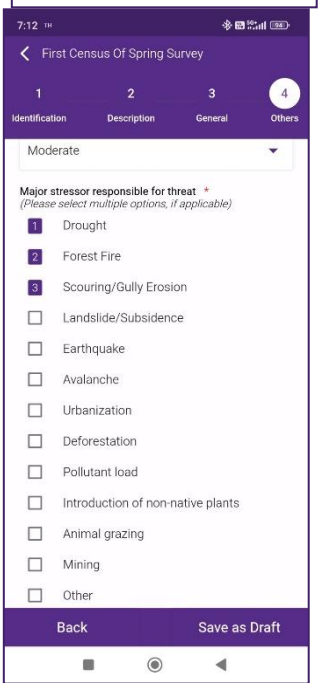
iv. Schedule form will be displayed after clicking on "**Add New**" Button. Schedule form shall be filled as per **Chapter 5 on "General Instructions for filling Spring Schedule"** of the Manual for the First Spring Census.

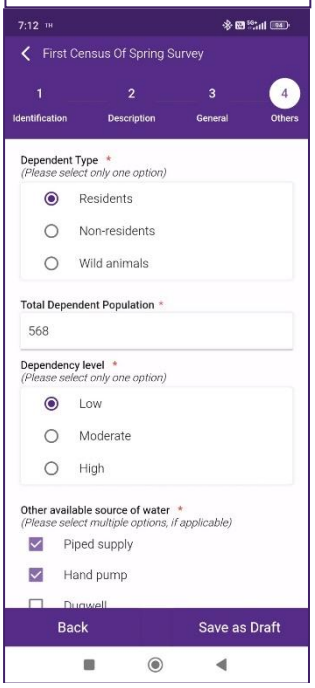

First Census Of Spring Survey
1 Identification
2 Description
3 General
4 Others
Spring Description
Location Accuracy: 0.1 m
Latitude °N
Longitude °E
Elevation
29.7926359
77.8740836
233.600006
Capture Latitude/ Longitude
Local Nomenclature of Spring
Baowli
Spring type *
(Please select only one option)
Free Flow
Seep
Spring Nature *
(Please select only one option)
Perennial
Seasonal
Dried
Back
Next

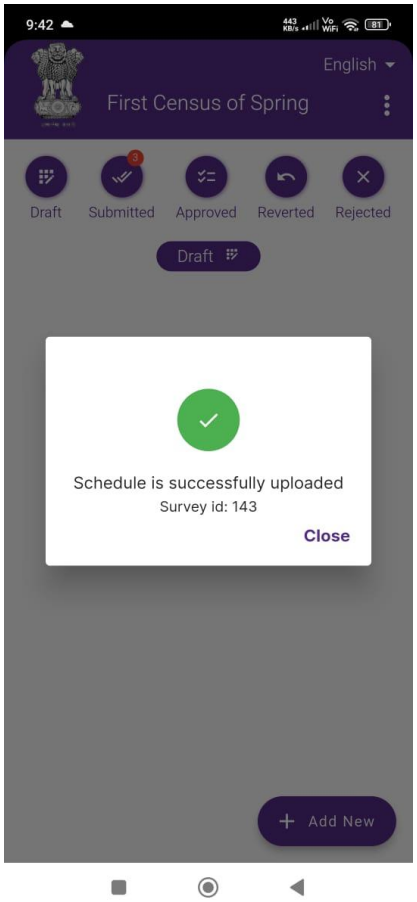

First Census Of Spring Survey
1 Identification
2 Description
3 General
4 Others
Identification Particulars
20 Nov 2024
7:11
State *
Uttarakhand
District *
Nainital
Urban/Rural *
Urban
Town *
Kaladhungi
Wards *
--select--
Back
Next


First Census Of Spring Survey
1 Identification
2 Description
3 General
4 Others
General Physical Characteristics of Spring
Whether spring discharge could be measured? *
(Please select only one option)
Yes
No
Seasonal variability of the discharge across the year *
(Please select only one option)
Low
High
Spring discharge trend in last 10 years *
(Please select only one option)
Highly decreased
Slightly decreased
No change
Increased
Colour of spring water *
Back
Next


First Census Of Spring Survey
1 Identification
2 Description
3 General
4 Others
General Physical Characteristics of Spring
Whether spring discharge could be measured? *
(Please select only one option)
Yes
No
Seasonal variability of the discharge across the year *
(Please select only one option)
Low
High
Spring discharge trend in last 10 years *
(Please select only one option)
Highly decreased
Slightly decreased
No change
Increased
Colour of spring water *
Back
Next


First Census Of Spring Survey
1 Identification
2 Description
3 General
4 Others
Moderate
Major stressor responsible for threat *
(Please select multiple options, if applicable)
Drought
Forest Fire
Scouring/Gully Erosion
Landslide/Subsidence
Earthquake
Avalanche
Urbanization
Deforestation
Pollutant load
Introduction of non-native plants
Animal grazing
Mining
Other
Back
Save as Draft


First Census Of Spring Survey
1 Identification
2 Description
3 General
4 Others
Dependent Type *
(Please select only one option)
Residents
Non-residents
Wild animals
Total Dependent Population *
568
Dependency level *
(Please select only one option)
Low
Moderate
High
Other available source of water *
(Please select multiple options, if applicable)
Piped supply
Hand pump
Dugwell
Back
Save as Draft


9:42
English
First Census of Spring
Draft
Submitted
Approved
Reverted
Rejected
Draft
Schedule is successfully uploaded
Survey id: 143
Close
Add New

*****

CHAPTER FIVE:

GENERAL INSTRUCTIONS
FOR
FILLING SPRING CENSUS SCHEDULE

5.0 GENERAL

5.0.1 All the information pertaining to the spring has been complied in the form of a schedule and divide in four sections i.e., (i) Identification Particulars, (ii) Spring Description, (iii) General Physical Characteristics of the Spring, and (iv) Other Information. All are described in details in the following sections.

5.1 IDENTIFICATION PARTICULARS:

5.1.1 The name of the State/ District/ Block (Tehsil)/ Village or State/District/Town/Ward whatever applicable will be recorded with respective LGD codes. Since spring Schedule contain information of Rural or Urban, it may be ensured that if spring is in Rural area, it has information of Block and Village code, and if spring is in Urban area the information relating to Urban i.e., Name of the town/city and their code with Ward number is reported in relevant item.

5.1.2 **Serial number of the Spring within village/town:** The springs in a village/ward should be given running serial numbers. This will serve as an identification no. of that particular springs in that village/town. While giving serial no. of the spring, serial numbers are to be given starting from 01. The serial number must be given starting from 01 separately for spring in each village or ward.

5.2 SPRING DESCRIPTION

5.2.1 Item 01: Locational Information

- Latitude, Longitude, and Altitude will be recorded in the mobile application using the inbuilt GPS of smartphone.
- To ensure the accuracy, the enumerator should avoid standing under the covered area.
- It is likely that for some reason, the smartphone may not record the Altitude information then enumerator need not worry on that and may proceed with the schedule.

5.2.2 Item 02: Local Nomenclature of Spring

- Enumerator may select the appropriate local nomenclature of the spring from the dropdown list provided in the mobile app.

- If the name is not available in the dropdown list, enumerator may select the option ***'other'*** and enter the name by typing.

5.2.3 Item 03: Spring Type

- Enumerator may select the appropriate option depending upon the spring type *(refer the concepts and definition for understanding the Free flow spring and Seep spring, Point No. 2.1.1).*

5.2.4 Item 04: Spring Nature

- Enumerator may select the appropriate option depending upon the spring nature after discussing with local residents/users who have been using the spring water for a considerably longer duration.

Perennial spring: Discharge is available throughout the year.

Seasonal spring: Discharge is available in the selected months of the year.

Dried spring: Springs which used to provide water in the past for the community, however, are at present not discharging water.

5.2.5 Item 05: Whether this spring emerged in a last 10 years?

- Enumerator may select the appropriate option either 'Yes' or 'No' after discussing with local residents/users who have been residing in the area for a considerably longer duration.

5.2.6 Item 06: Does spring discharge muddy water in rainy season?

- Enumerator may select the appropriate option either 'Yes' or 'No' after discussing with local residents/users who have been residing in the area and using the spring water for a considerably longer duration.

5.2.7 Item 07: Cleanliness in and around the spring

- Enumerator may select the appropriate option either 'Satisfactory' or 'Unsatisfactory' after visual inspection.

5.2.8 Item 08: Spring ownership

- Enumerator may select the appropriate option either 'Public' or 'Private' after discussing with local residents/users.

5.2.9 Item 09: Whether there is any chamber/tank to collect the water?

- Enumerator may select the appropriate option either 'Yes' or 'No' depending upon the availability of chamber or tank for collecting the spring water.



Fig. 5.1 Spring with storage tank

5.2.10 Item 10: Whether there is any pipe water supply from spring?

- Enumerator may select the appropriate option either 'Yes' or 'No' by inspecting the presence/absence of any pipe water supply to any village/households by drawing water from the spring.

5.2.11 Item 11: Capture three photographs for additional details

There is the provision of capturing the photographs for additional details,

Close-up shot: It should be captured about 2 m from the spring outlet to provide a close view of the spring.

Wide-angle shot: It should be captured about 10-20 m from the spring outlet by keeping the spring in the centre to record the view of spring's surroundings.

Selfie shot: Enumerator should capture a selfie with the spring.

For the sack of clarification Close-up shot and Wide-angle shot are illustrated in the following figures.



Fig. 5.2 Close-up shot

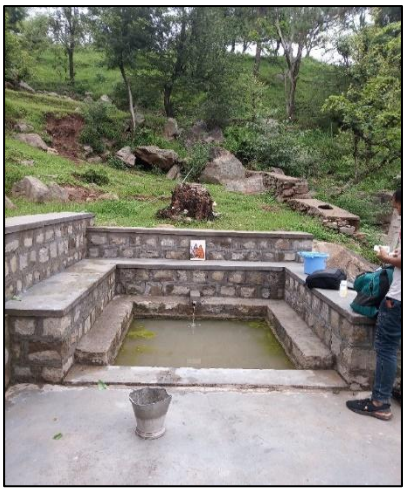


Fig. 5.3 Wide angle shot

5.3 GENERAL PHYSICAL CHARACTERISTICS OF THE SPRING

5.3.1 Item 01: Whether spring discharge could be measured?

- Enumerator must ensure that the spring discharge is measured, subsequently the option ‘Yes’ may be selected.
- However, in some extreme cases if it is not possible to measure the discharge the enumerator may select the option ‘No’.
- For free flow springs, manual discharge measurement is carried out in the following steps.
- Collect the known volume of water in a graduated bucket or water collecting cane.
- Take the average of three measurements: the volume of water collected and the time taken to collect the water.
- Calculate the spring discharge by dividing the volume by the time taken to collect the water.



Fig. 5.4 Discharge measurement of a Free flow spring.

For seep springs, discharge measurement is carried out in the following steps.

- Mark the level of water in the chamber
- Remove a known volume of water from the chamber seep
- Record the time taken by the water to attain its previous level
- Calculate the spring discharge by dividing the volume by the time taken to collect the water.



Fig. 5.5. Discharge measurement of a Seep type spring.

5.3.2 Item 02: No. of spring outlets?

- Enumerator may enter the no. of spring outlets as there could be multiple outlets in an individual spring.

- Based upon the no. of spring outlets, respective volume of water *(in litre)* collected and corresponding time taken to collect the water should be entered *in (min:sec)*.
- Discharge of the individual outlets will be shown automatically by the application along with the total discharge of the spring.



Fig.5.6 Springs with three outlets

5.3.3 Item 03: Seasonal variability of the discharge across the year

- Spring discharge getting increased/decreased considerably (more than 100%), i.e., getting doubled or halved in some months of the year, implies 'High' seasonal variability of the spring. Otherwise, the seasonal variability is 'Low'.
- Enumerator may select the appropriate option either 'High' or 'Low' after discussing with local residents/users who have been residing in the area and using the spring water for a considerably longer duration.
- The insight on seasonal variability aids in comprehending the spring's reliability as a water source throughout the year. For instance, a spring with high seasonal variability exhibits significant fluctuations in discharge magnitude across different months, whereas a spring with low seasonal variability maintains relatively consistent discharge levels throughout the year.

5.3.4 Item 04: Spring discharge trend in last 10 years

- Enumerator may select the appropriate options i.e., 'Highly decreased', 'Slightly decreased', 'No change', and 'Increase' after discussing with local residents/users who have been residing in the area and using the spring water for a considerably longer duration.

5.3.5 Item 05: Colour of spring water

- Enumerator may select the appropriate options based on the visual inspection of spring water. Generally, the pure water is 'Colorless', however, due to some impurity there may be some color.

5.3.6 Item 06:Smell/odour of spring water

- Enumerator may select the appropriate options i.e., 'Agreeable', or 'non-agreeable' based on the presence of any odour in the spring water.

5.3.7 Item 07: Taste of spring water

- Enumerator may select the appropriate options i.e., 'Objectionable', or 'Unobjectionable' based on the taste of spring water. In case the water has smell or color, it is advisable to make the appropriate entry after discussing with local residents/users.

5.3.8 Item 08: Temperature of spring water

- Enumerator may select the 'Hot' if the spring is 'Thermal Spring', otherwise the 'Cold' option will be selected.

5.4 OTHER INFORMATION

5.4.1 Item 01: Dominant land use land cover in spring upstream

- Land use land cover in the spring upstream can be of multiple type, however, the enumerator should select the dominant type from available options in the dropdown menu i.e., Agriculture, Forest, Pasture, Shrubs, Settlement while recording the information.

5.4.2 Item 02: Land use land cover in and around spring location

- Enumerator should select the land use land cover in the spring location from available options in the dropdown menu i.e., Agriculture, Forest, Pasture, Shrubs, Settlement while recording the information.

5.4.3 Item 03: Resource threat

- Enumerator should interact with the local residents/users who have been residing in the area and using the spring water for a considerably longer duration to assess the possibility of resource threat to the sustenance of spring. Accordingly, the option 'Yes' or 'No' should be selected.

Item 03(a): Degree of threat

In case the 'Resource threat' to spring is identified, then the enumerator should record the appropriate option for 'Degree of threat' i.e., 'Low', 'Moderate', and 'High' as per the interaction with the local residents.

Item 03(b): Major stressor responsible for threat

The enumerator should try to identify the most pressing causes threatening the sustenance of spring by discussing with the local residents and select the appropriate option in the application after discussing with the local resident.

5.4.4 Item 04: Usage of spring water

- Enumerator should select the appropriate option(s), up to three, in order of preference, for 'Usage of spring water' after discussing with local residents/users who have been residing in the area and using the spring water for a considerably longer duration.

5.4.5 Item 05: Dependent type

Enumerator may select the appropriate option after discussing with local residents/users who have been residing in the area and using the spring water for a considerably longer duration. If dependent type is "Resident", then please enter "Total dependent Population".

5.4.6 Item 06: Dependency level

- Dependency level of a spring may be decided based on the level of extent to which local people are dependent on the springs for their daily water needs.
- If the local populace is fully dependent on the spring, enumerator should select the option 'High'. Similarly, based on the dependency level, options 'Moderate' and 'Low' may be exercised. This information should be filled by interacting with the local residents/users.

5.4.7 Item 07: Other available source of water

- Based on the availability of the other sources of water in the village, appropriate options i.e., other spring, piped supply, hand pump, dugwell, pond, none, or other may be exercised.

5.4.8 Item 08: Whether the spring has undergone any springshed/watershed management program?

- Enumerator should discuss with local people and local implementing agencies if the particular spring has been treated under any springshed or watershed management programme?
- Notably, for last couple of years some state agencies and NGOs have been treating springs under various sprigshed/watershed management programmes.

To ensure the accuracy and relevance of this ancillary information, enumerator must actively engage with local residents and stakeholders. Interacting with the community members allows enumerators to obtain first-hand knowledge and insights about the springs and their associated aspects. This participatory approach fosters a sense of ownership among the local stakeholders and includes their valuable perspectives in the census. Including the views and concerns of the community members is important as they possess invaluable knowledge and observations accumulated through their interactions with the springs over time.

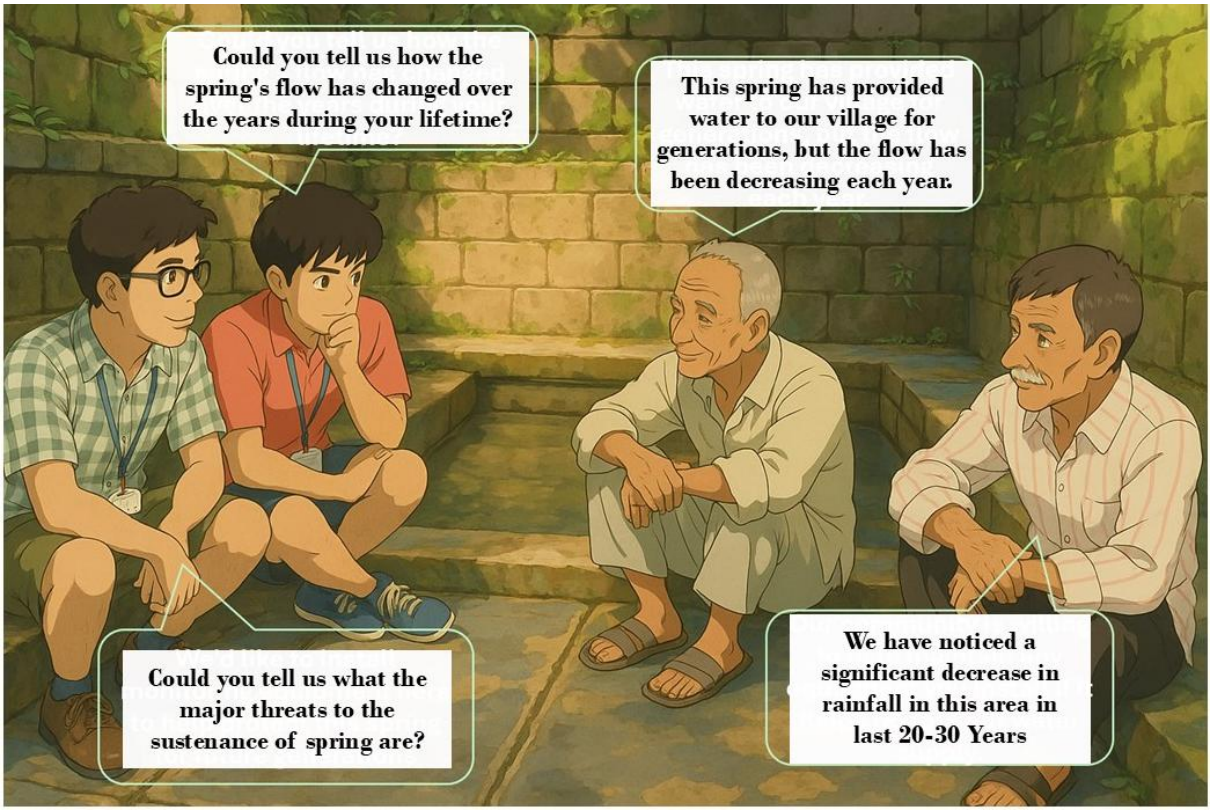


Fig. 5.7 Interaction with senior citizens to grasp evolution in spring flow regime over time

CHAPTER SIX:

FREQUENTLY ASKED QUESTIONS

Q1. Whether a spring located in Forest area is to be included in the census?

Ans. Yes, all springs which located in the geographical boundary of Union of India and have visible manifestation must be covered in the census. Spring located in the forest area will be surveyed under the nearest village located to that forest.

Q2. Can a spring that only flows during the rainy season be considered seasonal?

Ans. No, a seasonal spring is a spring that discharges water for parts of the year, typically after receiving recharge from rainfall. However, springs that only flow during the rainy season are not true springs, but rather delayed surface runoff. Therefore, enumerators must ensure that the springs they survey have a notable duration of flow (>2-3 months) after the rainy season to be considered a genuine spring.

Q3. What does it mean by dried springs?

Ans. A dried spring refers to a spring that had a significant history of discharge (>10 years) in the past but has since ceased to flow due to various reasons. The history of such springs must be verified through local accounts and testimony from residents, and photographic evidence must be provided to substantiate the existence of the dried spring, showcasing clear indications of its past flow.

Q4. How will the discharge of a spring connected to a piped supply be measured?

Ans. The department or agency responsible for tapping the spring for water supply must be having the estimates of discharge data of the tapped spring. Consequently, the discharge value provided by the department or agency will be entered into the mobile app.

Q5. How "Spring discharge trend in last 10 years" will be known?

Ans. The identification can be made after consulting with a few elderly individuals who have utilized the spring water for long durations, gaining valuable insights from their experiences and knowledge.

Q6. How to record the "Colour of water"?

Ans. Freshwater is typically colourless and appears transparent when filled in a glass. However, when impurities are present, the water may take on a different colour (become coloured) and appear cloudy or blurry when filled in a glass.

Q7. How to record the "Taste of water" if it has bad odour or impurities?

Ans. If the water has a bad odour or visible impurities, the enumerator should not taste it. Instead, they should select the answer 'Objectionable'. However, if the water appears clean and free of unpleasant odour, the enumerator may consult with local residents to determine its quality, rating it as either 'Objectionable' or 'Unobjectionable' accordingly.

Q8. 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 spring census shall be conducted in these areas.

Q9. 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.

*****

ANNEXURES

Annexure-I

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

S.No.	State_Name	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/TOWNS/WARDS

S.No.	State Name	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.

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Annexure-II

ILLUSTRATIONS FOR WATER BODY "ACCEPT AS SPRING" AND "REJECT AS SPRING"

SN	Accept as Spring	Remarks
1		Focused discharge/seepage collected in a stone pitching struture (kund/ *Bawdi*)
2		Oozing water collected through GI pipe with the help of Concrete wall
3		Oozing water guided through a pipe and collected in a plastic drum for further supply to the village through a pipe.

4		Oozing water guided through a bamboo stem.
5		Spring water with pipe outlet

	Reject as Spring	
6		Cemented tank use for irrigation on terrace field filled by the water tapping from local drainage line through plastic pipe
7		Artificial stone masonry structure to collect water from diffuse discharge of groundwater (Pond/Pokhar etc.)

8		Local Drainage line (Nallah) as water is not suddenly oozing from the earth.
9		Waterfall-A stream falling from a topographical height

10		Waterfall-A stream falling from a topographical height
11		Rainwater collected at hilltop due to topographical depression
12		Wetland formed due to accumulation of surface /subsurface runoff at foothills

13		It is a step well with only diffused seepage water
14		Seepage water which appeared on excavation of drain

*****

Annexure-III

SCHEDULE FOR 1ST CENSUS OF SPRINGS

FIRST CENSUS OF SPRINGS
REFERENCE YEAR 2023-24
SPRING SCHEDULE

Rural-1/Urban-2

I IDENTIFICATION PARTICULARS (Standard Codes to be used)

(a) State..... Code (b) District..... Code

For Rural
(a) Block/Tehsil..... Code (d) Villages name..... Code

For Urban
(e) Town/Municipality..... Code (f) Ward No.

Serial no. of spring within village/town

Unique Identification Key for Spring, with prefix 'S' *(If urban give code for town and ward)*

R/U	State	District	Tehsil/Town/Block	Village/Ward	Sl. No. within village/town

Timestamp of Survey *[dd-mmm-yyyy hh:min]*

II SPRING DESCRIPTION

1. Locational Information
Latitude *(Degree Decimal)* Longitude *(Degree Decimal)* Altitude *(m, a.m.s.l.)*

2. Local Nomenclature of Spring...(Fetch data from the Table).....

3. Spring type: Free Flow-1, Seep-2 Code

4. Spring Nature: Perennial-1, Seasonal-2, Dried-3 Code

5. Whether this is a newly emerged spring *[within the last 10 years]:* Yes-1, No-2 Code

6. Does spring discharge muddy water in rainy season? Yes-1, No-2 Code

7. Cleanliness in and around the spring: Satisfactory-1, Unsatisfactory-2 Code

8. Spring ownership: Public-1, Private-2 Code

9. Whether there is any chamber/tank to collect the water? Yes-1, No-2 Code

10. Whether there is any pipe water supply from spring? Yes-1, No-2 Code

11. Capture three photographs for additional details
- **(a) Close up shot of spring** *(about 2 m from the spring outlet)*
- **(b) Wide angle shot of spring** *(about 10-20 m from the spring outlet)*
- **(c) Selfie with spring**

III GENERAL PHYSICAL CHARACTERISTICS OF THE SPRING

1. Whether spring discharge could be measured? Yes-1, No-2 Code

2. No. of spring outlets *[If the answer of III (1) is 'Yes' i.e., Code-1]*

Volume *(litres)* Duration *(min:sec)* Discharge *(litre per minute)*

3. Seasonal variability of the discharge across the year: High-1, Low-2 Code

4. Spring discharge trend in last 10 years:
Highly decreased-1, Slightly decreased-2, No change-3, Increased-4 Code

5. Colour of spring water: Colourless-1, Coloured-2 Code

6. Smell/odour of water: Agreeable-1, Non-agreeable-2 Code

7. Taste of water: Objectionable-1, Unobjectionable-2 Code

8. Temperature of spring water: Hot-1, Cold-2 Code

IV OTHER INFORMATION

1. Dominant land use land cover in spring upstream:
Agriculture-1, Forest-2, Pasture-3, Shrubs-4, Settlement-5 Code

2. Land use land cover in and around spring location:
Agriculture-1, Forest-2, Pasture-3, Shrubs-4, Settlement-5 Code

3. Resource threat: Yes-1, No-2 Code

If the answer of IV (3) is 'Yes' i.e., Code-1, fill the following details,

(a) Degree of threat: Low-1, Moderate-2, High-3 Code

(b) Major stressor responsible for threat *(up to three codes, in the order of preference):*
Drought-1, Forest Fire-2, Scouring/Gully Erosion-3, Landslide/Subsidence-4, Code
Earthquake-5, Avalanche-6, Urbanization-7, Deforestation-8, Pollutant load-9, Code
Introduction of non-native plants-10, Animal grazing-11, Mining-12, Other-13 Code

4. Usage of spring water *(up to three codes, in the order of preference):* Code
Drinking/Cooking-1, Washing/Sanitation, Cattles/Livestock-3, Code
Irrigation-4, Indutrial-5, Other-6 Code

5. Dependent type: Residents-1, Non-residents-2, Wild animals-3 Code

If the answer of IV (5) is 'Residents' i.e., Code-1, fill the following details,
(a) Total dependent population:

6. Dependency level: Low-1, Moderate-2, High-3 Code

7. Other available source of water *(select multiple options, if applicable):*
Other spring-1, Piped supply-2, Hand pump-3, Dugwell-4, Pond-5, None-6, Other-7 Code

8. Whether the spring has undergone any springshed/watershed management program? Code
Yes-1, No-2, Not known-3

Remarks, if any:
Checked by:
Name:
Designation of Supervisory Officer:
Mobile No.:

Signature of Enumerator:
Name:
Designation of Enumerator:
Mobile No.:

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Annexure-IV

VALIDATION CHECK FOR SCHEDULE OF 1ST SPRING CENSUS

Item/ Field	Validation check	Special check (Howler check to be shown in separate form for re-check of higher value)
[1] IDENTIFICATION PARTICULARS		
Serial no. of spring within village/town	Should be unique and greater than zero for the particular village/town	This serial number will be used in the creation of the Unique Identification Key for spring. Submission of schedule will not be allowed without Serial Number.
[2] SPRING DESCRIPTION		
2.1. Locational Information		
2.2. Local Nomenclature of Spring	Value should be in text only.	Show error in case of special characters.
2.3. Spring type	Valid codes are 1 and 2	
2.4. Spring Nature	Valid codes are 1, 2, and 3 If code in item 2.4 is 3, then the schedule will be completed here itself and no further information will be collected.	
2.5. Whether this is a newly emerged spring [within the last 10 years]	Valid codes are 1 and 2	
2.6. Does spring discharge muddy water in rainy season?	Valid codes are 1 and 2	
2.7. Cleanliness in and around the spring	Valid codes are 1 and 2	
2.8. Spring ownership	Valid codes are 1 and 2	
2.9. Whether there is any chamber/tank to collect the water?	Valid codes are 1 and 2	

2.10. Whether there is any pipe water supply from spring?	Valid codes are 1 and 2	
2.11. Capture three photographs for additional details		
[3] GENERAL PHYSICAL CHARACTERISTICS OF THE SPRING		
3.1. Whether spring discharge could be measured?	Valid codes are 1 and 2	
3.2. No. of spring outlets	(i) If code in item 3.1 is 1 then item 2 will be filled, otherwise item 3.2 will be skipped. (ii) Value to be given in the 'No. of Spring Outlet' should be >0	According to the value given in the 'No. of Spring Outlet' Volume (in litres) and Duration (min:sec) will be filled. e.g., if there are 2 No. of Spring Outlets, then Volume and Duration for two outlets will be filled.
3.3 Seasonal variability of the discharge across the year	Valid codes are 1 and 2	
3.4. Spring discharge trend in last 10 years	Valid codes are 1,2,3, and 4	
3.5 Colour of spring water	Valid codes are 1 and 2	
3.6 Smell/odour of water	Valid codes are 1 and 2	
3.7 Taste of water	Valid codes are 1 and 2	
3.8 Temperature of spring water	Valid codes are 1 and 2	
[4] OTHER INFORMATION		
4.1 Dominant land use land cover in spring upstream	Valid codes are 1,2,3,4 and 5	
4.2 Land use land cover in and around spring location	Valid codes are 1,2,3,4 and 5	
4.3 Resource threat	Valid codes are 1 and 2 [If code in Item 4.3 is 1 then item 4.3(a), and 4.3(b) will be filled]	
4.3(a) Degree of threat	Valid codes are 1, 2, and 3	

4.3(b) Major stressor responsible for threat	Valid codes are 1 to 13	Only three codes should be filled.
4.4 Usage of spring water	Valid codes are 1 to 6	Only three codes should be filled.
4.5 Dependent type	Valid codes are 1, 2, and 3 [If code in Item 4.5 is 1, then Item 4.5(a), 4.5(b), 4.5(c), and 4.5(d) will be filled.]	
4.5(a) Number of dependent villages	Value should be >0	
4.5(b) Name of dependent villages	Value should be in text only.	Show error in case of special characters.
4.5(c) Number of dependent households	Value should be >0	
4.5(d) Number of dependent people	Value should be >0	
4.6 Dependency level	Valid codes are 1,2, and 3	
4.7 Other available source of water	Valid codes are 1 to 6	Multiple codes can be filled.
4.8 Whether the spring has undergone any springshed/watershed management program?	Valid codes are 1,2, and 3	

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Annexure-V

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 for 1st census of Springs which will be drawn from the grants released to the States/ UTs by the Dept. of Water Resources, RD & GR. Ministry of Jal Shakti under 'Irrigation Census' scheme. 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.

Rates of Honorarium:

In the 1st Census of Spring, rates of honorarium for coordination, supervision and conduct of the field work shall be as under:

Table 1: Rate of different expenditure involved in conducting the 1st Springs Census

S. No.	Item		Rate (in Rs.)
I	**Honorarium**		
i.	Field Allowance per Spring for enumerator (Maximum)	Category-I States/UTs	750/-
		Category-II States/UTs	500/-
		Category-III States/UTs	400/-
		Category-IV States/UTs	250/-
ii.	Block Level Officer		960/-
iii.	District level Officer		1320/-
iv	State/UT level Officer		3600/-
II	**Contingency per Spring**		75/-
III	Computerization cost per Spring (maximum including validation)		3/-
IV	**User charges of smart phone per Spring**		5/-

Contingency amount is to be spent on

i. Providing State/ district level trainings to enumerators and supervisors
ii. Advertisement for Spring Census, publicity, mass awareness etc.,

iii. Transportation to be used by the State for supervisory work during the census.

iv. Providing training honorarium to the District level officers, who would provide training to the enumerators and Block level supervisors maximum up to @ 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 1st spring census.

Contingency amount Rs. 75/- per spring for Census of springs will be provisioned.

Field allowance:

Keeping the nature of work in view for conducting the spring census provision of field allowance for enumerators, block level, district, state level officers have been made in the first spring census. The field allowance is flexible and to be fixed by the States/UTs after due deliberations keeping in view the no. of springs, the distances and terrain in their states. It is proposed to categories the states as tabulated below depending upon the nature of topography and difficulty in traversing the terrain while carrying out the spring census.

Table 2: Category of states/UTs based on topography

Category	Name of States/UTs
I.	**Extremely Tough Topography**
1.	Ladakh
2.	Lahaul and Spiti of Himachal Pradesh
3.	Arunachal Pradesh
II.	**Highly Tough Topography**
1.	Kerala
2.	Nagaland
3.	Manipur
4.	Mizoram
5.	Tripura
6.	Kashmir Division of Jammu & Kashmir
III.	**Moderately Tough Topography**
1.	Assam
2.	Himachal Pradesh Except Lahaul and Spiti
3.	Uttarakhand
4.	Jammu Division of Jammu & Kashmir

5.	Meghalaya
6.	Sikkim
IV.	**Gentle Topography**
1.	Andhra Pradesh
2.	Bihar
3.	Chhattisgarh
4.	Gujarat
5.	Haryana
6.	Jharkhand
7.	Karnataka
8.	Madhya Pradesh
9.	Maharashtra
10.	Odisha
11.	Punjab
12.	Rajasthan
13.	Tamil Nadu
14.	Telangana
15.	Uttar Pradesh
16.	West Bengal
17.	Andaman & Nicobar Islands
18.	Chandigarh
19.	Dadra & Nagar Haveli
20.	Delhi
21.	Daman &Diu
22.	Goa
23.	Lakshadweep
24.	Puducherry

The funds shall be released to States/UTs on reimbursement basis. After conduct of census, the States/UTs shall be required to submit the proposal for release for funds adhering to above norms. The honorarium shall be reimbursed as per the details mentioned in Table 1. Since the terrain is not uniform throughout the State, after the conduct of census, States shall be asked to inform the names of district which are on the higher altitude as compared to the remaining parts of State and accordingly, the admissible honorarium shall be reimbursed to the State.

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Annexure-VI

MOBILE SPECIFICATIONS

For data collection, the specifications of the mobile phones to be used are as follows:

1. Android version should be above 10
2. Minimum storage should be 10 GB
3. RAM should be minimum 6 GB
4. ROM should be minimum 10 GB
5. Battery should be 2500 - 4000 mAh
6. Location Sensor is mandatory

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Annexure-VII

SCRUTINY CHECK POINTS

1. If 2.4=1 then 3.1 can't be 2 [*If a spring is perennial then it can't not have zero discharge*]
2. If 2.4=3, then all fields after 2.4 should be blank [*For dried springs, the schedule stops at item 2.4, so there should be no entries recorded after it*]
3. If item 3.1 is yes, then item 3.2 should be >0. [*If Spring discharge could be measured, then no. of spring outlets should be greater than zero*]
4. If item 3.2=0 then entry in item discharge in item 3.2 should be zero [*if number of outlets is zero then there should not be any discharge*]
5. In item 3.2, Outlet 1 Discharge, Outlet 2 Discharge, Outlet 3 Discharge etc should not be exactly equal [*In a spring with multiple outlets, all the outlets should not have the same discharge*]
6. If 3.8=1, then all fields after 3.8 should be blank [*For hot springs, the schedule stops at item 3.8, so there should be no entries recorded after it*.]
7. If item 4.5=3, then item 4.1 and item 4.2=2 or 3 or 4 [*If dependent type is Wild animals, then Land use land cover in and around spring location should be forest or pasture or shrubs only*[1]]
8. If item 4.5 = 2 or 3, then 4.5 (a) should be blank [*If dependent type is non-residents or wild animals, then there will be no dependent population*]
9. If item 4.6=1 or 2 then, item 4.7 not equal to 6 [*If dependency level is low or moderate, then other available source of water cannot be None*]
10. If item 3.5 = 2, and item 3.6=2, then item 3.7 should be 1 (objectionable) and item 4.4. should not be 1 (Drinking use) [*If Spring water is coloured and smell of water is non-agreeable, then taste of water should be objectionable and water should not be used for drinking purpose*]

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[1] This condition has been relaxed in some states since agricultural lands found close to the forest boundaries where the wild animals use the spring water.

Annexure-VIII

ADDITIONAL VALIDATION CHECK POINTS

Item No.	Item/Field	Checks
3.1	Whether spring discharge could be measured?	Show warning when spring is free flow but discharge can't be measured in item 3.1
3.2	No. of spring outlets	Show warning when number of spring outlets is more than 3 in item 3.2 (outlet)
3.2	No. of spring outlets (discharge)	Show warning when spring discharge is more than 100 lpm in item 3.2 (discharge)
3.7	Taste of water	Show warning when spring water is coloured with non-agreeable smell/odour but taste is Unobjectionable in 3.7
4.4	Usage of spring water	Show warning when either spring water is coloured or non - agreeable smell/odour or objectionable taste but still is used for Drinking/cooking in item 4.4
4.5 (a)	Total dependent population	Show warning when Spring is privately owned and number of dependent populations is more than 100 in item 4.5(a)
4.7	Other available source of water	Show warning when there is high dependency on Seasonal Spring but other available source of water is 'none' in item 4.7

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अधिक जानकारी के लिए कृपया संपर्क करें

For further details, please contact

स्प्रिंग अध्ययन प्रकोष्ठ,
राष्ट्रीय जलविज्ञान संस्थान,
रुड़की, उत्तराखण्ड
ई मेल : dir.nihr@gov.in

लघु सिंचाई (सांख्यिकी) स्कंध,
नई दिल्ली
ई मेल : mistat-mowr@gov.in

Cell for Spring Studies,
National Institute of Hydrology,
Roorkee, Uttarakhand
Email: dir.nihr@gov.in

Minor Irrigation (Statistics) Wing,
New Delhi
Email: mistat-mowr@gov.in

जल संसाधन, नदी विकास एवं गंगा संरक्षण विभाग
जल शक्ति मंत्रालय, भारत सरकार
Department of Water Resources, River Development & Ganga Rejuvenation
Ministry of Jal Shakti, Government of India