Presentation on workshop conducted on 17-08-2023 at SCOPE Complex Auditorium, New Delhi regarding

1st Census of Springs

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# Springs – a lifeline

- Natural door of groundwater in the mountains
- Points where invisible groundwater become visible in the form of springs
- Springs are primary source of water and for many sole source of water in the mountain region as supply of water from glaciers and rivers are not economically viable due to their location disadvantage.
- 200 million Indians (about 15% population of country) depend on spring water (NITI Aayog, 2018)
- Hardly there is any river in the world which is not fed by springs





# **Spring Population**

State Name	Number of villages with Springs	Total number of villages	Villages which report having Springs (%)
Arunachal Pradesh	2086	5589	37.3
Assam	2997	26395	11.4
Manipur	1405	2581	54.4
Meghalaya	3810	6839	55.7
Mizoram	453	830	54.6
Nagaland	639	1428	44.7
Sikkim	425	451	94.2
Tripura	141	875	16.1
West Bengal (only Darjeeling)	221	688	32.1
Himachal Pradesh	2597	20690	12.6
Jammu & Kashmir	3313	6553	50.6
Uttarakhand	594	16793	3.5
All Himalayan States	18681	89712	20.8

Source: Table 1 – Statistics of spring population across the Himalayan States from NITI Aayog Working Group - I Report, 2018

# Major recommendations of NITI Aayog report

- Creation of a web-enabled database/web portal on which the springs can be mapped/tagged.
- All State/UT government departments, R&D institutions and NGOs working on springs and spring-shed management will upload data on the web-portal.

# Need & benefits of spring census

- To understand the present status of springs in space and time.
- Local springs can be managed efficiently in changing climate and Land use Land cover (LULC)
- Govt. can allocate resources and decide priorities for the States for implementing the springshed activities.
- Base document to assess the impact of springshed program run by different state governments agencies, NGOs, etc.

# Steps for conducting spring census

### 1. Standardization of concept and definition of spring

To distinguish between spring and other water bodies

### 2. Formulation of Spring Schedule

- To develop a simple but comprehensive format to collect essential information on spring, i.e., geographic coordinates and other characteristics
- ➤ To develop reference manuals/instruction for filling of the form

#### 3. Data collection mechanism

To develop mobile application for conducting spring mapping

### 4. Capacity building

- To enable the nodal agency for carrying-out spring census
- To conduct Training of Trainers (ToT) through all India, regional and state level workshop

### 5. Data Collection and verification in the field

- > To deploy field force for carrying-out spring census
- To verify the data through sample check and timely address the problems in data collection

### 6. Database management and analysis

> To storage, manage, and disseminate the information

## Standard Concept and Definition of Spring for Spring Census

A spring is a focused discharge of naturally occurring groundwater on the Earth's surface.



Free flow spring

**Seep spring** 

- Springs to be Captured in the Census
  - > Visible
  - > Accessible
  - ➤ Where water comes out only during the rainy season will not be the part of the census
  - > Recently dried/defunct springs

# Water body to be mapped as spring

 Natural springs that have pipes installed at their outlets to guide flow should be included in the mapping of springs.







• Free-flowing springs characterized by concentrated flow, small and localized groundwater flow that occur through permeable sediments or fractures in rock, resulting in the formation of pools of water.





Bowli/Baowri in Udhampur district of J&K <sup>9</sup>

# Water body not to be mapped as spring

Naturally occurring groundwater flows with diffuse discharge cannot be classified as springs.



Water logging due to seepage



**Swampy wetland** 

■ Spring inventory should not include ponds and artificial situations, viz. dug wells, artesian wells and groundwater that appears in excavations.







Pond Dug well Artesian well

# Standardization of Spring Schedule for Spring Census

## Various parameters to be covered in Spring Census

- 1. Spring location
- 2. Spring type
- 3. Spring nature
- 4. Spring ownership
- 5. Availability of water collection
- 6. Chamber/tank
- 7. Pipe water supply from spring
- 8. Seasonal variability of discharge
- 9. Spring discharge trend in last 10 years
- 10. Dominant land use land cover in spring

- 11. Upstream
- 12. Land use land cover in and around spring location
- 13. Resource threat
- 14. Degree of threat
- 15. Type of major stressors
- 16. Usage of spring water
- 17. Dependent type
- 18. Dependency level
- 19. Other available source of water
- 20. Springshed management

## **Spring Schedule Form**

Code

#### FIRST CENSUS OF SPRINGS REFERENCED YEAR 2023-24 SPRING SCHEDULE Rural-1/Urban-2 IDENTIFICATION PARTICULARS (Standard Codes to be used) Code (d) Villages name...... (a) Block/Tehsil. Code (f) Ward No. (e) Town/Municipality..... Serial no. of spring within village/town Unique Identification Key for Spring (If urban give code for town and ward) Tehsil/Town/Block Village/Ward Timestamp of Survey [dd-mmm-yyyy hh:min] II SPRING DESCRIPTION 1. Locational Information Longitude (Degree Decimal) Altitude (m, a.m.s.l.) Latitude (Degree Decimal) 2. Local Nomenclature of Spring. 3. Spring type: Free Flow-1, Seep-2 Code 4. Spring Nature: Perennial-1, Seasonal-2, Dried-3 5. Whether this is a newly emerged spring [within the last 10 years]: Yes-1, No-2 6. Does spring discharge muddy water in rainy season?; Yes-1, No-2 7. Cleanliness in and around the spring: Satisfactory-1, Unsatisfactory-2 8. Spring ownership: Public-1, Private-2 9. Whether there is any chamber/tank to collect the water? Yes-1, No-2 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) 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 4. Spring discharge trend in last 10 years:

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Highly decreased-1, Slightly decreased-2, No change-3, Increased-4

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

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		
Dominant land use land cover in spring upstream:     Agriculture-1, Forest-2, Pasture-3, Shrub	os-4, Settlement-5	Code
2. Land use land cover in and around spring location: Agriculture-1, Forest-2, Pasture-3, Shrub	os-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	ng details,	
(a) Degree of threat; Low-1, Moderate-2, High-3		Code
(b) Major stressor responsible for threat (up to three or Drought-1, Forest Fire-2, Scouring/Gully Erosion-3 Earthquake-5, Avalanche-6, Urbanization-7, Defor Introduction of non-native plants-10, Animal grazir	3, Landslide/Subsidence-4, restation-8, Pollutant load-9,	Code Code
<ol> <li>Usage of spring water (up to three codes, in the order of pi Drinking/Cooking-1, Washing/Sanitation, Cattles/Li Irrigation-4, Indutrial-5, Other-6</li> </ol>		Code Code
5. Dependent type: Residents-1, Non-residents-2, Wild anima	ls-3	Code
If the answer of IV (5) is 'Residents' i.e., Code-1, fill the fi (a) Number of dependent villages: (b) Name of dependent villages: (c) Number of dependent households:	ollowing details,	
(d) Number of dependent population:		
6. Dependency level: Low-1, Moderate-2, High-3		Code
7. Other available source of water (select multiple options, if Other spring-1, Piped supply-2, Hand pump-3, Dug		Code
8. Whether the spring has undergone any springshed/wate	ershed management program? Yes-1, No-2	Code
Remarks, if any: Checked by: Name: Designation of Supervisory Officer: Mobile No.:	Signature of Enumerator: Name: Designation of Enumerator: Mobile No.:	
Pa	nge 2 of 2	

	7			
(a) Sta	ite		Code	(b) District Code
For R	ural			
a) Blo	ck/Tehsil		Code	(d) Villages name Code
For U	rban			
e) To Serial	wn/Municipali	g within village/tow	n (If urban give code for to	2 2000
Serial	wn/Municipali	g within village/tow	vn	(n and ward)

II SPRING DESCRIPTION	
1. Locational Information Latitude (Degree Decimal) Longitude (Degree Decimal)	Altitude (m, a.m.s.l.)
2. Local Nomenclature of Spring.	
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	
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)	

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) Number of dependent villages:	
(b) Name of dependent villages:	
(c) Number of dependent households:	
(d) Number of 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, Other-6	Code
8. Whether the spring has undergone any springshed/watershed management program? Yes-1, No-2	Code
, gg	

# **General Instruction for filling Spring Census Format**

#### GENERAL INSTRUCTIONS FOR FILLING SPRING SCHEDULE

#### I IDENTIFICATION PARTICULARS

- If the spring is in rural area, then code 1 may be reported, otherwise code 2 for urban may be given.
- The name of the State/ District/ Block (Tehsil)/ Village or State/District/Town/Ward whatever applicable will be recorded with respective codes as updated by States/ UTs and sent to NIC. The name and codes given in updated directory for the State has to be used.
- Since spring Schedule contain information of Rural or Urban, it may be ensured that
  if spring is in Rural area, it has information of Tehsil and Village code and if spring
  is in Urban area the information relating to Urban i.e., Name of Town and their code
  with Ward number is reported in relevant item.
- These spring information are to be compiled in Village Schedule or Urban Schedule by type of spring by Rural/Urban bifurcation. It may be ensured that the spring is to be reported either in Village Schedule or in Urban Schedule as per their area.

#### Serial number of the Spring within village/town:

- The springs in a village/town 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 001.
- The serial number has to be given starting from 001 separately for spring in each village or town.

#### Unique Identification key for water body:

- This has been kept to have the unique code for identification of spring. 21 Digit code starting from rural/ urban to serial number of the spring is to be given which will be combination of code for rural/ urban, State, District, Tehsil/ town/ block, village/ ward and its serial number.
- It may be noted that for urban area, code of town and their ward number is to be reported. For rural areas, the Block/Tehsil code and Village code is to be reported. No box should be left blank. Leading zeroes may be put. For example, if the Tehsil or block code is only four digits, then leading two zeroes to be added to make it six digit code.

#### Timestamp of the survey:

Time of enumeration has to be recorded in the format dd/mmm/yy/hh/min 18 Sep 2022 04 PM 30 Minutes will be filled as 18/Sep/2022/16/30

#### II SPRING DESCRIPTION

#### Item 01: Locational Information

- Latitude, Longitude, and Altitude will be recorded in the NIH-ISHVAR 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 survey.

#### Item 02: Local Nomenclature of Spring

- Enumerator may select the appropriate local nomenclature of the spring from the dropdown list provided in the NIH-ISHVAR app.
- If the name is not available in the dropdown list, enumerator may select the option 'other' and enter the name by typing.

#### 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).

#### 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 considerable longer duration.
- Perennial spring: Discharge is available throughout the year.
- <u>Seasonal spring:</u> Discharge is available in the selected months of the year.
  - <u>Dried spring:</u> Springs which used to provide water in the past, however, are at present not discharging water.

#### Item 05: Whether this is a newly emerged spring?

 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 considerable longer duration.

#### 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 considerable longer duration.

#### Item 07: Cleanliness in and around the spring

 Enumerator may select the appropriate option either 'Yes' or 'No' after visual inspection.

#### Item 08: Spring ownership

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

#### 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.

#### 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.

#### Item 11: Capture three photographs for additional details

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

<u>Close-up shot:</u> 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.

#### III GENERAL PHYSICAL CHARACTERISTICS OF THE SPRING

#### 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 elect the option 'No'.

#### 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 app along with the total discharge of the spring.

#### 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 considerable longer duration.

#### 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 considerable longer duration.

#### 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.

#### 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.

#### Item 07: Taste of spring water

 Enumerator may select the appropriate options i.e., 'Objectionable', or 'Unobjectionable' based on the taste of spring water.

#### Item 08: Temperature of spring water

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

#### IV OTHER INFORMATION

#### 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.

#### 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.

#### 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 considerable 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 after discussing with the local resident.

#### 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 considerable longer duration.

#### Item 05: Dependent type

#### Item 05(a): Number of dependent villages

Enumerator should enter the numerical value of number of the village(s) dependent on the spring for their daily water needs.

#### Item 05(b): Name of dependent villages

Enumerator should enter the name of the dependent village(s) on the spring for their daily water needs.

Item 05(c): Number of dependent households

Enumerator should enter the number of households of the village(s) dependent on the spring for their daily water needs. It is not necessary that all the households of a village may depend on the spring, as some household may have other option(s) viz., pipe water supply, hand pump, other spring, etc.

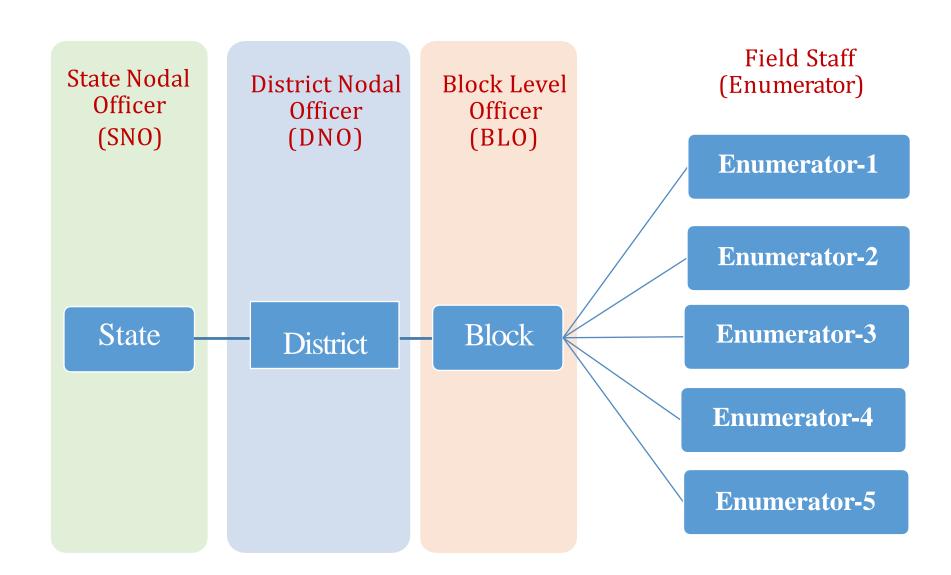
Item 05(d): Number of dependent population

Enumerator should enter the number of population dependent on the spring for their daily water needs.

- Item 06: Dependency level
  - Dependency level of a spring may be decided based on the level of extent by 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. These information should be filled by interacting with the local residents/users.
- 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 and pond may be exercised.
- 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.

## **Operational Guidelines**

Operational Structure of the First Spring Census at State Level



## **Functions/Responsibilities of Different Officers**

### 1. Enumerator

> To map the springs using mobile app as per the Spring Schedule

### 2. Block Level Officer

- To check whether Enumerator is filling all the fields of spring schedule, as required, and follow up in case of any discrepancy.
- To physically verify the 10% of the springs or 50 springs (spread across the Block), whichever is maximum, in order to ensure the correctness of data collected.
- > To fill up the supervisor's report form and submit it to the district level officer concerned (with copy to State Nodal Office).

### 3. District Level Officer

- > To physically inspect at least 10% of the total springs or 50 springs (spread across the all blocks of the district)
- > To fill up the supervisor's report form and submit it to the State Nodal officer with a copy to the Centre.

### 4. State Nodal Officer

To ensure that the monthly progress report on the Spring Census sent by the State adequately reflects scrutiny /inspection details sent by Block/ District level officer along with the field work.

## **Committees**

## 1. Steering Committee at State level

➤ Chairman : Administrative Secretary of the Nodal Department

➤ Members : Representative from ----- CWC

**CGWB** 

State Departments of Revenue

Irrigation & Water Resources Department

Panchayati Raj Department

**State Planning Department** 

Department of Economics and Statistics

Rural Development Department

State head of NSSO (FOD)

Any other, as required

**Responsibility:** Steering Committee at State level will Supervise and follow up the progress of the entire implementation exercise of First Spring Census at State level.

## **Committees**

### 1. Technical Sub-Committee at State level

➤ Chairman : Regional Chief Engineer of CWC

> Members : Representative from regional office of : CWC

**CGWB** 

**State Water Information Center** 

State Groundwater Department

State Geological Department

Soil & Water Conservation Department

Any other, as required

**Responsibility:** To provide the technical inputs and guide the state nodal department during the census for smooth conductance of the census.

## Training programs at different level

### 1. Central Level Training

- A training-cum-Workshop for the Trainers will be organized at the Central level in New Delhi in which officers from each State/UT shall participate
- > Scientists from NIH, CGWB, and NIC will impart training on the technical aspect of spring census.

## 2. Regional Level Training

- To be organized by the Center in association with identified State nodal agencies
- Nodal officer from different States/UT along with the concerned officials from each State/UT will be the participants who will be trained as trainers.

## 3. State Level Training

- ➤ To be organized by the State nodal Department at State/District headquarter.
- Training will be provided to DNOs, BLOs, and enumerators by the trainers trained in the Regional level trainings.
- ➤ A representative from the Centre can participate as an observer in some such State level trainings
- > State Ground Water Board officers, officers from regional offices of Central Water Commission, SASA/DES Head and DDG, FOD, NSSO of the respective State shall be requested to attend the State trainings.

## **Categorization of States/UTs**

### 1. Extremely Tough Topography

- i. Ladakh
- ii. Lahaul & Spiti of Himachal Pradesh
- iii. Arunachal Pradesh

### 2. Highly Tough Topography

- i. Nagaland
- ii. Manipur
- iii. Mizoram
- iv. Tripura
- v. Kashmir Division of Jammu & Kashmir

### 3. Moderately Tough Topography

- i. Assam
- ii. Himachal Pradesh Except Lahaul and Spiti
- iii. Uttarakhand
- iv. Jammu Division of Jammu & Kashmir
- v. Meghalaya
- vi. Sikkim

### 4. Gentle Topography

> Remaining States/UTs of India

## **Release of funds**

- The funds shall be released to States/UTs on reimbursement basis.
- States/UTs shall be required to submit the proposal for release for funds.
- Grants-in-aid will be provided to host States/UTs for organizing Regional Training Workshops & Data Processing Workshops on behalf of the Ministry, for publication State/UT level Census reports.
- State shall submit detailed work plan for 1st Springs Census along with time lines for completion of each stage of Census, at the time of submission of proposal for first instalment.

## Rates of different expenditure involved in conducting the 1st Springs Census

Srl no.	Item	Rate (in Rs.)
1	Honorarium	
i.	Field allowance per spring for enumerators (maximum)	
	Category-1 State/UT	750/-
	Category-2 State/UT	500/-
	Category-3 State/UT	400/-
	Category-4 State/UT	250/-
ii.	Block level officer	960/-
iii.	District level officer	1320/-
iv.	State/UT officer	3600/-
2	Contingency per spring	75/-
3	Computerization cost per schedules (max including validation)	3/-
4	User charges of smart phone per spring	5/-

# **Submission of Monthly Progress Report**

- The State/UT Governments will submit Monthly Progress Report for 1st Springs Census in the prescribed format to the Ministry by email.
- The States/ UTs may also devise their own mechanism to monitor the flow of work regularly.
- In addition to the Monthly progress report, a report regarding completion of field work from all villages/towns is to be submitted as per the prescribed format to ensure completion of field work at enumerator/supervisor/block and district level.

## Tentative program of work for 1st springs census

Release of grant by the Centre : As and when demanded by States/UTs

All India Training Workshop : August 2023

Pilot testing of mobile app : January-April 2024

Regional Training Workshops : June-August 2024

State /District Training programmes : July-September 2024

■ Start of field work of census on ground : October 2024

Cleaning, validation and scrutiny of data : October 2024 to March 2025

Examining of tables by Central Ministry : April 2025 to June 2025

# **Thanks**

## 1st Census of Springs

## **Background**

- Earlier the survey of springs across the Himalayan States was conducted, however the data was incomplete and also not so accurate.
- NITI Aayog, recommended the creation of a web-enabled data base / web portal on which all the springs can be mapped / tagged.
- Therefore the process for 1st spring census across the country has been started.
- Standardized format (Spring Schedule) / data collection format has been shared and discussed in the workshop.
- Complete guidelines have been also discussed for filling up of schedule / form in the workshop.
- Suggestions were sought from the Nodal officers of all the States/UT's on the schedule.
- Various suggestions have been shared in the workshop.

## 1st Census of Springs

## **Actionable points**

- It has been informed that these suggestions shall be discussed in the group responsible for preparing Springs Schedule and after the approval, these suggestions shall be included in the final schedule.
- A mobile app shall be prepared by the NIC which will be used for capturing the each and every detail of springs.
- Nomination of Nodal Officers at various levels:- State Nodal Officers, District Nodal Officer, Block Nodal Officers and field staff.
- Establishment of Steering Committee at State level, Technical Sub-committee at State level.
- Training program to be organize at different levels i.e., Central level training / Regional level training / State level training.
- Start of actual field work.
- Validation and Scrutiny of data.
- Final examination by the Ministry.

## Tentative program of work for 1st springs census

Release of grant by the Centre : As and when demanded by States/UTs

All India Training Workshop : August 2023

Pilot testing of mobile app : January-April 2024

Regional Training Workshops : June-August 2024

State /District Training programmes : July-September 2024

Start of field work of census on ground : October 2024

Cleaning, validation and scrutiny of data : October 2024 to March 2025

Examining of tables by Central Ministry : April 2025 to June 2025

# Summary of the presentation

- Importance of Springs in sustaining the water demand of the country.
- Need and importance of the spring census.
- Steps for conducting first spring census.
- Standard concept and definition of spring.
- Standardization of spring schedule for spring census.
- Operational guidelines for springs census.