सातवीं लघु सिंचाई गणना रिपोर्ट

Seventh Minor Irrigation Census Report

ASSAM, BIHAR, DELHI, LADAKH, SIKKIM

सत्यमेव जयते



भारत सरकार

GOVERNMENT OF INDIA

जल शक्ति मंत्रालय

MINISTRY OF JAL SHAKTI

जल संसाधन, नदी विकास और गंगा संरक्षण विभाग

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION

लघु सिंचाई (सांख्यिकी) शाखा

MINOR IRRIGATION (STATISTICS) WING

Seventh Minor Irrigation Census

Volume II - Part 1

(Assam, Bihar, Delhi, Ladakh, Sikkim)



Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Minor Irrigation (Statistics) Wing

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C R Paatil



सत्यमेव जयते

जल शक्ति मंत्री
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Minister of Jal Shakti
Government of India

Message

Water is a critical input for agricultural productivity and food security, particularly in arid and semi-arid regions. Minor Irrigation Schemes play a vital role in the irrigation and agricultural sectors of the country and offer distinct advantages, including shorter gestation periods, relatively lower capital requirements, and quicker benefits to farmers. At the same time, changing rainfall patterns, fluctuations in groundwater levels, variations in river flows, technological progress, and increasing water demand underline the need for periodic assessment of Minor Irrigation Schemes to support informed planning, policy formulation and decision-making.

Precise and authentic statistics on minor irrigation are vital for framing future plans of action, policy-making, and research. Systematic enumeration, protection, conservation, and rejuvenation of the minor irrigation schemes are essential to ensure long-term economic, social, and environmental sustainability.

With a view to maintain an accurate and robust data base on irrigation schemes, the Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, has undertaken 7th Minor Irrigation (MI) Census, apart from the 2nd Census of Water Bodies, the 1st Census of Major and Medium Irrigation (MMI) Projects, and the 1st Census of Springs, using 2023-24 agricultural year as reference year, covering all States and Union Territories.

On the occasion of **World Water Day 2026**, the Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, has published a brief analytical report presenting results from the **7th Minor Irrigation (MI) Census** for the **five States, viz., Assam, Bihar, Delhi, Ladakh and Sikkim, that have completed the census activities ahead of schedule.**

I wish to congratulate the officers of States and Union Territories, along with Minor Irrigation (Stat) Wing/NIC, DoWR, RD & GR, for carrying out this cumbersome task.

The publication showcases selected State-level indicators and preliminary insights from finalised data on minor irrigation schemes, with the objective of encouraging the timely completion of censuses by other States and promoting data-driven planning, policy formulation, and decision–making in the water resources sector.

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Message

Water remains the cornerstone of agricultural growth and food security, especially in regions where scarcity defines everyday life. In this context, Minor Irrigation Schemes have emerged as a crucial support system for farmers. Their strength lies in their efficiency: they demand less capital, deliver results faster, and shorten the time between investment and benefit.

Yet, the landscape of water management is constantly shifting. Irregular rainfall, declining groundwater reserves, changing river dynamics, technological innovations, and rising demand for water all highlight the importance of regularly evaluating these schemes. Reliable data is not just useful — it is indispensable for shaping policies, guiding research, and ensuring that irrigation strategies remain sustainable in the long run.

Recognizing this, the Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, has launched a comprehensive effort to build a robust database. The 7th Minor Irrigation Census, alongside the 2nd Census of Water Bodies, the 1st Census of Major and Medium Irrigation Projects, and the 1st Census of Springs, uses the agricultural year 2023–24 as its reference point and spans every State and Union Territory.

On World Water Day 2026, the Ministry released an analytical report highlighting early findings from five States — Assam, Bihar, Delhi, Ladakh, and Sikkim — that successfully completed their census activities ahead of schedule. This achievement reflects the dedication of State officers, the Minor Irrigation (Stat) Wing, NIC, and the Department itself, who worked tirelessly to carry out this demanding exercise.

The publication presents key indicators and preliminary insights, serving both as recognition of the progress made and as encouragement for other States to complete their census work promptly. Ultimately, the goal is clear: to foster data-driven planning, informed policymaking, and sustainable decision-making in the water resources sector.

(Dr. Raj Bhushan Choudhary)

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FOREWORD

Agriculture remains the backbone of India's economy and a highly water-intensive sector, making efficient management of irrigation resources vital for food security and sustained growth. The Minor Irrigation Schemes have proven to be a transformative force, offering resilience against climatic vagaries and generating employment that fuels rural development. A comprehensive and reliable database on minor irrigation is essential for effective planning, policy formulation and informed decision-making.

The Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, has been conducting the Census of Minor Irrigation structures on a quinquennial basis since 1986–87.

The Minor Irrigation Census is carried out in the rural areas of all States and Union Territories and covers all groundwater and surface water-based irrigation structures with a Culturable Command Area (CCA) of up to 2,000 hectares. To date, six such censuses have been completed with reference years 1986–87, 1993–94, 2000–01, 2006–07, 2013–14, and 2017–18.

I am pleased to inform that the Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD & GR), Ministry of Jal Shakti, has undertaken 7th Minor Irrigation Census, apart from 2nd Census of Water Bodies, along with the 1st Census of Major and Medium Irrigation Projects and the 1st Census of Springs, (using 2023-24 agricultural year as reference year), in all States and Union Territories, continuing its tradition of comprehensive data collection from States, Districts, and villages. These censuses are being conducted in a paperless, fully digital mode through a mobile application, which is expected to result in significant savings in terms of time and cost, while ensuring data quality.

This publication of the 7th Minor Irrigation Census, prepared by the Minor Irrigation Statistics Wing of this Department, provides accurate insights into data of minor irrigation schemes across five States, viz., Assam, Bihar, Delhi, Ladakh and Sikkim, that have completed the census activities ahead of schedule. The sincere and honest efforts of these States will encourage timely completion of the census work by other States, and promote data-driven planning, policy formulation and decision-making in the water resources sector.

I am confident that the findings contained in this publication will serve as a valuable resource for planners, policy makers, researchers, agricultural scientists, administrators, and all stakeholders committed to strengthening India's irrigation infrastructure and agricultural economy. By showcasing selected State-level indicators and early insights from the finalised data, the report demonstrates the value of collaborative implementation and supports evidence-based planning and management of water resources.

(V. L. Kantha Rao)

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MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
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Preface

The Minor Irrigation (MI) Census is a critical statistical exercise that provides a comprehensive and reliable evidence base for planning, policy formulation, and sustainable management of water resources in the country. The data generated by the census supports informed decision-making in the minor irrigation sector, improves water use efficiency, and strengthens the overall framework for water resources management.

The Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, has undertaken the **7th Minor Irrigation Census,** apart from the 2nd Census of Water Bodies, along with the 1st Census of Major and Medium Irrigation Projects and the 1st Census of Springs, using 2023-24 agricultural year as the reference year, across all States and Union Territories. These censuses are being conducted in a paperless, fully digital mode, leveraging technology to enhance data quality, timeliness, and operational efficiency.

This publication presents key highlights from the **7th Minor Irrigation Census data of the five States, namely, Assam, Bihar, Delhi, Ladakh and Sikkim, that have completed the census activities ahead of schedule**. The early completion achieved by these States reflects the **dedicated efforts, effective coordination, and commitment of officers and field functionaries at both the State and Central levels**, particularly those engaged in data collection, validation, and monitoring.

The report provides results of State-wise census data of six States by specific types of schemes, viz., dug-wells, shallow, medium and deep tube-wells, surface flow and lift schemes. This compilation is Volume II of the Report. Volume I – All India analysis and State-wise analysis of remaining States – shall be brought out separately.

I hope that the insights presented in this report will demonstrate the practical utility of census data, encourage timely completion of census activities by all other States, and promote the adoption of best practices in the implementation of large-scale statistical exercises. I take this opportunity to place on record my appreciation for the cooperation extended by the State Governments, nodal departments, field staff, and all stakeholders associated with the conduct of these censuses.

(Pally Kundu)

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Abbreviations

B

BLO
Block Level Officer.....15

C

CSS
Centrally Sponsored Scheme 13
CWC
Central Water Commission 15

D

DES
Directorate of Economics & Statistics 15
DLO
District Level Officer 15

F

FOD
Field Operation Division.....15

G

GIS
Geographical Information System 16

L

LGD
Local Government Directory 14

M

MMI
Major and Medium Irrigation 13

N

NIC
National Informatics Centre.....15
NSSO
National Sample Survey Office 15

R

RMIS
Rationalization of Minor Irrigation Statistics.....13

S

SLO
State Level Officer 15
SWIC
State Water Informatics Centre 15

1 INTRODUCTION

1.1. India has been primarily an agricultural country for ages. Water management is a crucial factor for agricultural output and food security. With the country's varied climate and limited water resources, efficient irrigation systems are crucial for food security and boosting crop yields.

1.2. MI schemes are a lifeline for many, especially small and marginal farmers, by providing timely, reliable and assured irrigation in supplementing agriculture throughout the year. Minor irrigation schemes are quick to implement, cost-effective, and benefit farmers directly. Moreover, they have the advantage of a short gestation period, require a smaller investment, and deliver benefits to farmers immediately. It acts as a critical buffer against rainfall variability and climate-induced risks. These schemes provide irrigation to help in sustaining agricultural production over the past years, especially in regions with limited coverage of MMI projects.

2 BACKGROUND

2.1. Water being a State subject, steps for augmentation, conservation and efficient management of water resources are primarily undertaken by the respective State Governments and Union Territories. In order to supplement the efforts of the State Governments, the Central Government provides technical and financial assistance to them through various schemes and programmes for the development of this sector.

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

2.3. Keeping this in view, a central scheme “Rationalisation of Minor Irrigation Statistics (RMIS)” was launched in 1987-88 with 100% Central assistance to the States/UTs. In 2017-18, this centrally sponsored scheme (CSS) was renamed as ‘Irrigation Census’.

2.4. For the implementation of the scheme, each State/UT identifies a Nodal Department for the collection, compilation and dissemination of information for the State. State Statistical Cells are generally created within the Nodal Department, so identified by the State Government. These Cells assist the Head of the Nodal Department or Census Commissioner in the State in organising, coordinating and supervising the Census as and when planned by the Ministry.

2.5. So far, six MI censuses have been conducted with reference years 1986-87, 1993-94, 2000-01, 2006-07, 2013-14 and 2017-18. In 2017-18, for the first time, the scope of the

"Irrigation Census" scheme was expanded to include the Census of Water Bodies, in convergence with the Minor Irrigation Census, with the objective of developing a national database of all water bodies. Now, the scope of the Irrigation Census scheme has further expanded to include Spring, Major, and Medium Irrigation Projects, covering all irrigation schemes in the country.

3 OBJECTIVE

3.1 The main objectives of the 'Irrigation Census' Scheme are:

i. To build up a comprehensive and reliable database in the minor irrigation sector for effective planning and policymaking, including water use efficiency, water budgeting, etc.
ii. To provide benchmark data up to the village level under Minor Irrigation Census.
iii. To provide a statistical frame of minor irrigation schemes for carrying out future surveys.
iv. To build a national-level database of Major and Medium Irrigation Projects since water resources projects are planned, formulated, implemented and maintained by the State Governments.

4 SCOPE & COVERAGE

4.1 Minor Irrigation Census is the complete enumeration of all minor irrigation schemes located within the geographical boundaries of the country. A scheme having a Culturable Command Area of up to 2,000 hectares individually is classified as a minor irrigation scheme. The census also covers irrigation schemes intended solely for groundwater recharge.

4.2 There are two types of minor irrigation schemes: groundwater schemes and surface water schemes. Groundwater schemes include dug wells and tube wells/bore wells. Surface water schemes include surface flow and surface lift schemes. Schemes which are `permanently not in use' for irrigation purposes in 2017-18 or before were not covered in this Census. The information during the Census was collected through three schedules, namely (i) Surface Water Schemes, (ii) Ground Water Schemes and (iii) Village Schedule.

4.3 The 7th MI Census was conducted only in rural areas of the whole of the Indian Union, and the village is the primary area unit of enumeration. The Census has used Local Government Directory (LGD) codes as on 12.02.2025 to list all villages in the country which have been developed by Ministry of Panchayati Raj. The hierarchy used is State/ District/ Sub District (Development Block)/villages in rural area.

5 METHODOLOGY OF 7TH MINOR IRRIGATION CENSUS

5.1. The 7th MI Census has been conducted entirely digitally through a mobile application, eliminating the need for paper-based data collection. To ensure smooth execution, nodal departments were designated in States/UTs, including the designation of State Level Officers (SLOs), District Level Officers (DLOs), Block Level Officers (BLOs), and Enumerators. The SLO is responsible for creating user accounts at the district level, which will cascade down to block-level officers, who assign villages to enumerators. Each village/ward is assigned to a single enumerator, ensuring no duplication.

5.2. The 2nd Census of Waterbodies has been conducted in convergence with the 7th Minor Irrigation Census using the 2023-24 agricultural year as the reference year. The enumerator begins the survey by capturing all water bodies within the village, then canvases the Surface Water schedule, the Ground Water schedule, and finally the Village schedule. The mobile application, functioning in both online and offline modes, is used for data collection, requiring enumerators to capture latitude/longitude and images of each scheme. While data entry and scrutiny will be carried out digitally, scrutiny takes place on an online portal developed by NIC. The data collected by the respective States/UTs has been examined at the Central level. The detailed process flow for the census work is provided in the manual for the 7th MI Census.

6 IMPLEMENTATION:

6.1. **Coordination**: A Steering Committee in each State with the Secretary of the Nodal Department for the 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) for overseeing various activities of Census. A technical Sub Committee under the Chairmanship of the Regional Chief Engineer of CWC, in charge of the State, to provide technical inputs and guide the State Nodal Statistical Cell during the Census operations (with members from CGWB and State Water Informatics Centre (SWIC)).

6.2. **Training:** Six two-day regional training workshops were held from December 2024 to January 2025 in Agartala (for North-Eastern States), Bengaluru (for Southern States), Lucknow and Chandigarh (for Northern States), Jaipur (for Western States), and Kolkata (for Eastern States). These sessions covered interpreting parameters in the MI schedule, filling schedule fields via the mobile app, and using the web app for deployment at the village, block, district, and state levels. On the second day, participants gained hands-on experience through field visits for spring enumeration. Resource persons from the central team, including Minor Irrigation (Statistics) DoWR, RD&GR, and the National Informatics Centre (NIC), contributed their expertise.

Thereafter, the State Government imparted training to the respective district and block functionaries.

6.3. **Scrutiny**: Validation checks are built into the Mobile Application, and BLO needs to ensure the correctness of the data before submitting the schedule to a higher level. The edit option in the schedule is available to BLO and enumerators. Once the BLO submits the village schedule, all schedules for the respective villages will be available to the DLO, SLO, and the Ministry. DLO needs to see the scrutiny reports generated in the portal for schedules and revert the schedules to BLO wherever corrections are required.

6.4. **Progress Monitoring**: Progress Monitoring was done at each level through the Dashboard and Task Monitoring module available in the web portal. Task Monitoring shows village-wise progress of the census work for each Block/District/State at the respective logins of Block, District, State, and Centre users. Detailed step-by-step instructions and audiovisuals prepared by NIC to demonstrate the use of the Mobile and Web application were shared with States/UTs.

6.5. **Help and Support**: A dedicated call centre and web-based helpdesk are available for resolving queries by the field functionaries. A web-based helpdesk module was incorporated in the web portal, and BLO/DLO and SLO can raise queries through the system.

7 METHODOLOGICAL CHANGES FROM 6TH TO 7TH MI CENSUS

7.1 The following are the methodological changes adopted in the 7th MI Census compared to the 6th MI Census.

i. Paperless and end-to-end digital solution with a mobile application for data collection and a web application for management and validation processes
ii. Recording Latitude, Longitude and images of all schemes
iii. Use of reverse GIS technology for ensuring accurate recording of Lat/Long of all schemes wherever village boundaries are available
iv. Use of LGD-coded villages/wards for preparing the frame of the census
v. Pre-population of previous census data in the mobile application for ease of data collection, which helps in modifying existing schemes/water bodies.

****

8 STATE REPORTS

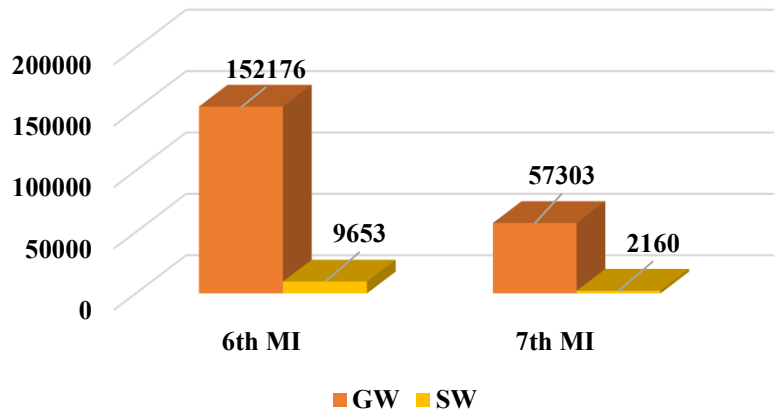
The 7th Minor Irrigation Census was launched in April 2025. In this State Report, five States that completed their census work earlier have been considered: Assam, Bihar, Delhi, Ladakh, and Sikkim. Key findings of this Census in respect of these States, along with an analysis and comparison with the 6th MI Census, are summarised below.

8.1 ASSAM

8.1.1 Assam reported 59,463 Minor Irrigation (MI) schemes in the 7thMinor Irrigation Census, out of which 96.4% (57,303 schemes) are Ground Water schemes and the remaining 3.6% (2,160 schemes) are Surface Water schemes (Table 8.1.2)

8.1.2 A comparison with the 6th Minor Irrigation Census reveals a sharp decline of 63% in the number of Minor Irrigation schemes, reflecting a significant reduction since the previous census round. As reported by the State, many schemes have become defunct due to groundwater depletion, poor maintenance, power constraints and structural damage.

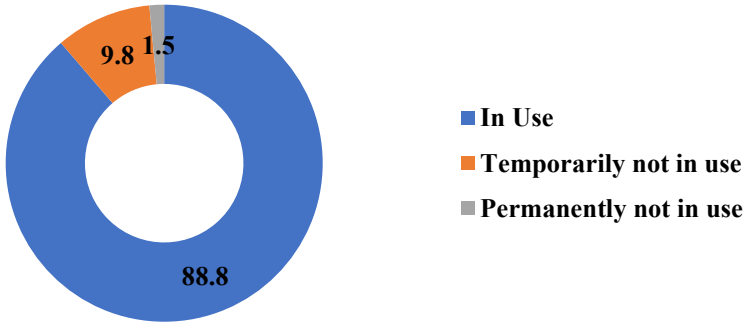
Chart 8.1.1: Number of schemes



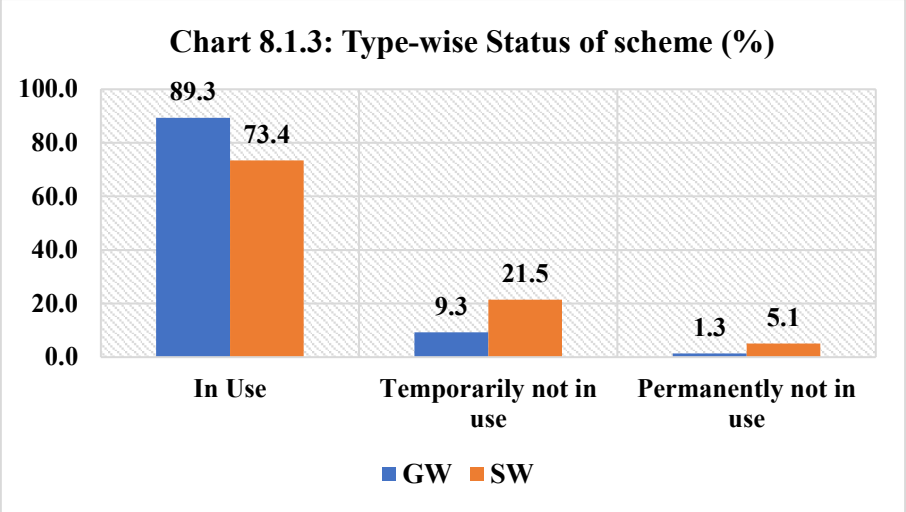
Status of MI Schemes:

8.1.3 Out of the total 59,463 Minor Irrigation (MI) schemes, 88.8% (52,780 schemes) are currently in use, 9.8% (5806 schemes) are temporarily not in use, and 1.5% (877 schemes) are permanently not in use.

Chart 8.1.2: Status of scheme

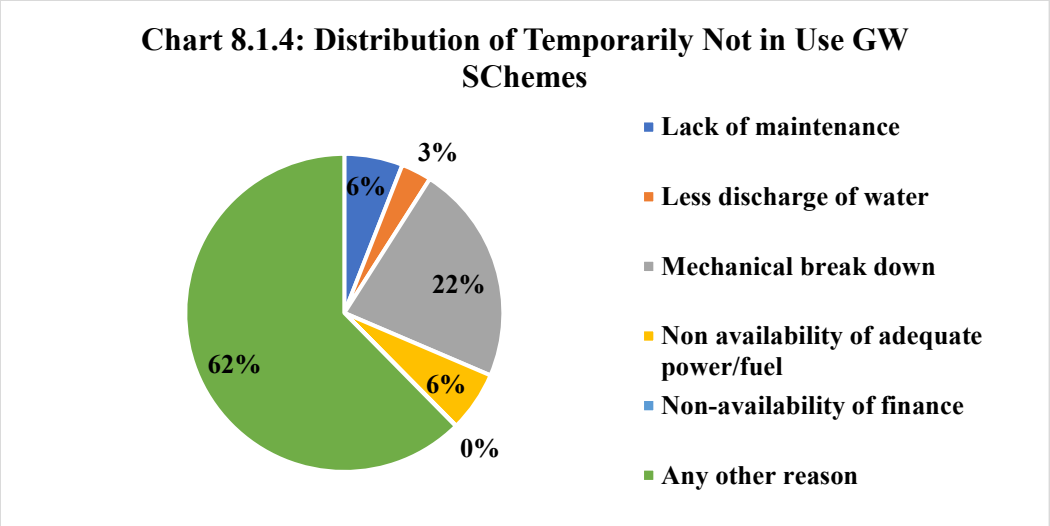


8.1.4 Among the temporarily not in use schemes, Ground Water schemes are predominantly not in use.

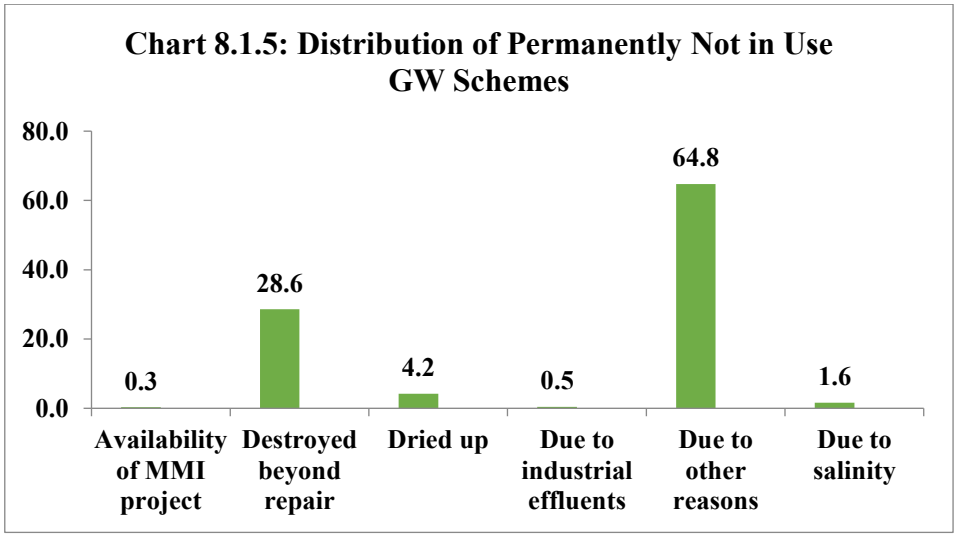


Reason for not in use schemes:

8.1.5 In temporarily not in use Ground Water schemes, apart from other reasons, the mechanical breakdown (22%) of schemes is the major issue.

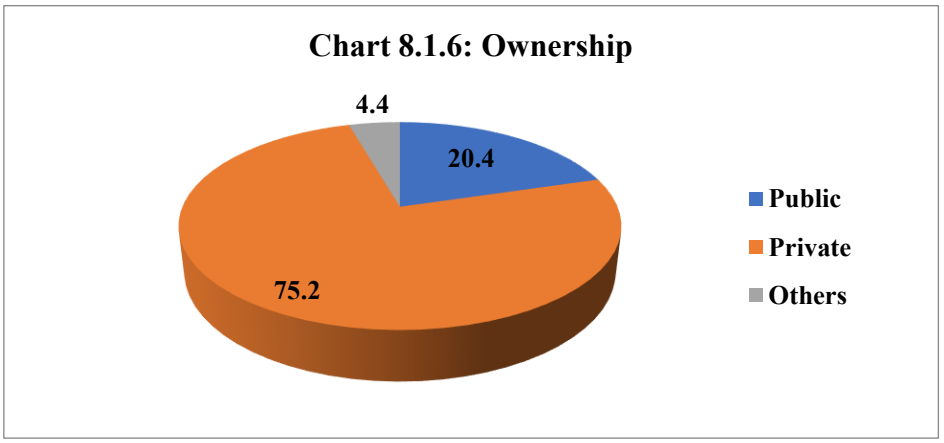


8.1.6 About 33% of the ground water schemes have become permanently defunct due to being destroyed beyond repair. Similar factors make the surface water schemes unusable.



Ownership of MI Schemes

8.1.7 The majority of the schemes are privately owned. Among the privately owned schemes, the majority are owned by individual farmers.



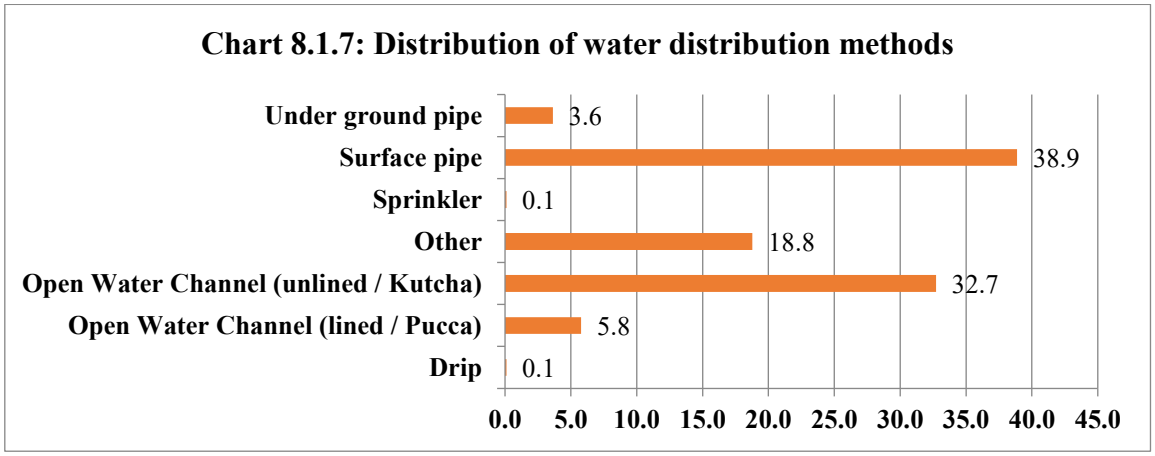
8.1.8 The dominance of private entities in owning MI schemes in Assam is evident from the following **Table 8.1. 1**

Table 8.1. 1: Distribution of ownership in MI Schemes

Ownership	% of schemes
Govt. Owned	20
Co-Operative Owned	0.2
Panchayat Owned	0.2
Other	4.4
Owned by Group of farmers	5.7
Owned by individual farmer	69.5

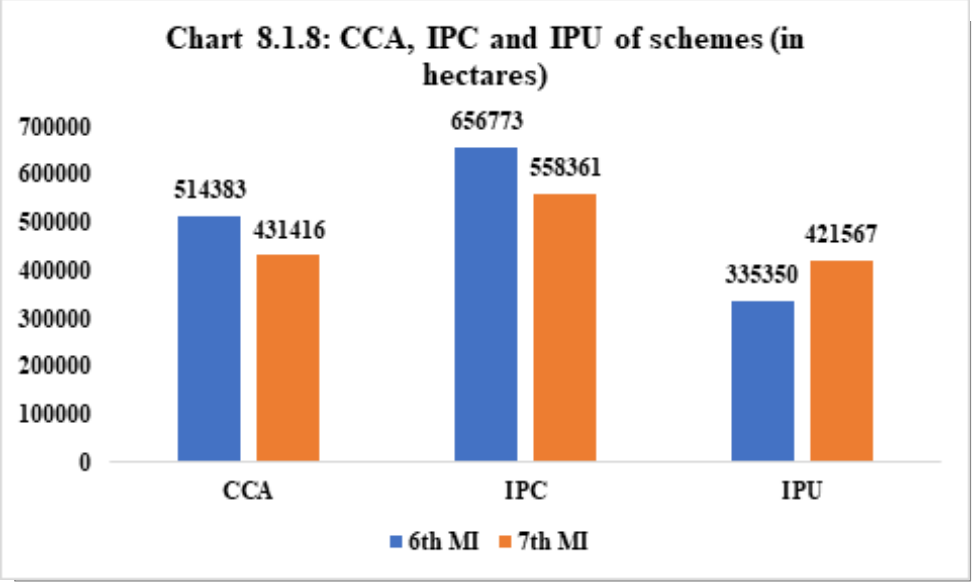
Water Distribution Methods:

8.1.9 Out of the 58,586 in-use schemes (in-use and temporarily not in use), 38.9 % schemes are using surface pipes, which is helpful in preventing water loss while distributing to the fields. However, 32.7 % schemes are still using Open Water Channel (unlined or kutcha).



Culturable Command Area, Irrigation Potential Created (IPC) and Irrigation Potential Utilised (IPU)

8.1.10 A decline in CCA and IPC has been observed in Assam. However, IPU has increased, which might be due to the use of better water distribution devices. The ratio of IPU to IPC in the State is 0.76 in the 7th MI Census, indicating that 76% of the created potential is utilised.



Underutilization of In-Use schemes

8.1.11 Out of 1586 in-use surface water schemes, 22.6% are under-utilised, whereas out of 51194 in-use ground water schemes, only 16.7% are under-utilised

Drinking water purpose

8.1.12 Out of the total 59,463 minor irrigation schemes, 3.1% schemes are also used for drinking water purposes.

Table 8.1.2: Key Parameters of 7th MI Census - Assam

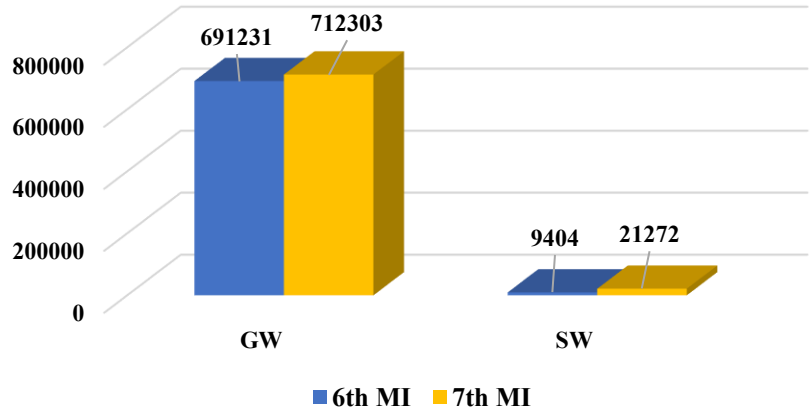
Parameter		Unit	Value	%
Number of schemes	Dug-wells	No.	809	1.4
	Tube wells	No.	56494	95.0
	Ground Water schemes	**No.**	**57303**	**96.4**
	Surface Flow	No.	1540	2.6
	Surface Lift	No.	620	1.0
	Surface Water schemes	**No.**	**2160**	**3.6**
	Total schemes	No.	**59463**	**100**
CCA, IPC and IPU	**CCA**	Ha	431416	
	IPC	Ha	558361	
	IPU	Ha	421567	
	% Ratio of IPU to IPC	%	**76**	
	Gap in IPC and IPU	Ha	136794	
Ownership	Individual ownership	No.	41329	69.5
	Group of Farmers	No.	3362	5.7
	Public owned	No.	12129	20.4
	Other		2643	4.4
	Total	**No.**	**59463**	**100**
Water Distribution Methods (in-use and temporarily not in use schemes)	Open Water Channel (Lined/ Pucca)	No.	3389	5.8
	Open Water Channel (unlined/ kutcha)	No.	19170	32.7
	Underground pipe	No.	2133	3.6
	Surface Pipe	No.	22773	38.9
	Drip	No.	60	0.1
	Sprinklers	No.	61	0.1
	Others	No.	11000	18.8
	Total	**No.**	**58586**	**100**

8.2 BIHAR

8.2.1 Bihar reported 7,33,575 Minor Irrigation (MI) schemes in the 7th Minor Irrigation Census out of which, 97% (7,12,303 schemes) are Ground Water schemes and remaining 3% (21,272 schemes) are Surface Water schemes (Table 8.2.1)

8.2.2 A comparison with the 6th Minor Irrigation Census reveals a 4.7% increase in the number of schemes. As reported by the State, the variation observed are due to natural growth of schemes, implementation of private tube wells under State Government's initiative Har Khet Ko Pani availability of financial loan facilities for farmers to adopt irrigation schemes and the exemption of electricity usage charges for irrigation purposes provided by the State Government.

Chart 8.2.1: Number of schemes



8.2.3 The State reported 3% increase in groundwater schemes and 126% increase in surface water schemes in comparison with the 6th MI census, of which Dug Wells increased by 43%, Shallow Tube Wells increased by 83%, Deep Tube Wells increased by 36% and Medium Tube Wells declined by 33%. In addition, 947 Artesian Wells have been reported.

Chart: 8.2.2: Type of GW Schemes

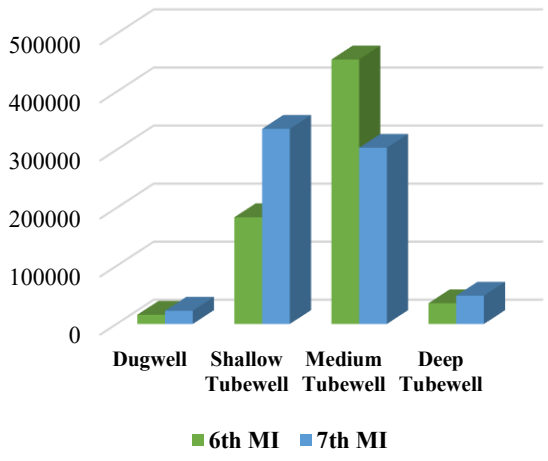
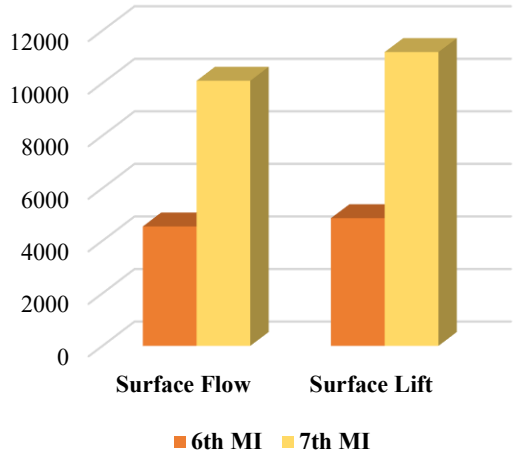


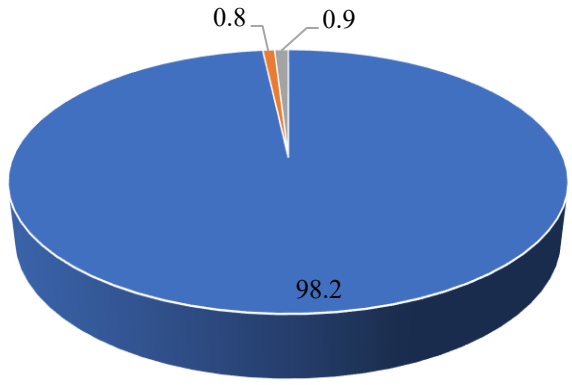
Chart 8.2.3: Type of SW Schemes



Status of MI Schemes:

8.2.4 Out of the total 7,33,575 Minor Irrigation (MI) schemes, 98.2% (7,20,684 schemes) are currently in use, 0.8% (5,980 schemes) are temporarily not in use, and 0.9% (6,911 schemes) are permanently not in use.

Chart 8.2.4: Status of Schemes



Reason for not in use schemes:

8.2.5 There are 5,281 temporarily not in use groundwater schemes, of which 46% were unused due to other reasons and 22% due to mechanical breakdown. Among the 699 temporarily not in use surface water schemes, 49% were non-functional due to other reasons, 23% due to incomplete storage filling, and 17% due to reduced water discharge.

Chart 8.2.5: Distribution of Temporarily Not in Use GW schemes

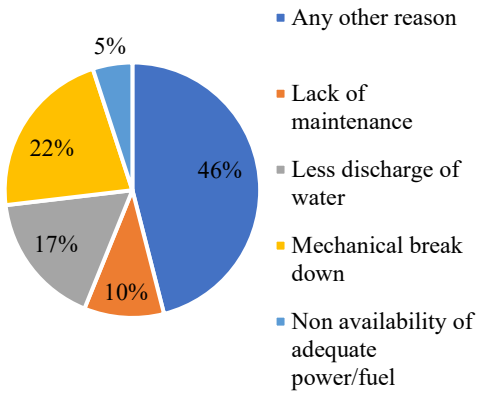
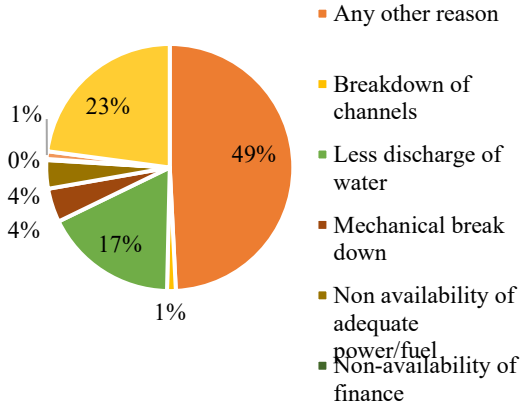


Chart 8.2.6: Distribution of Temporarily Not in Use SW schemes



8.2.6 In permanently not in use groundwater (6532) schemes, the major issues beyond other reasons (55%) were drying up (23%) and being destroyed beyond repair (13%). For

permanently not in use surface water schemes, 62% were due to other reasons, 15% due to drying up, and 10% due to industrial effluents.

Chart 8.2.7: Distribution of Permanently Not in Use GW schemes

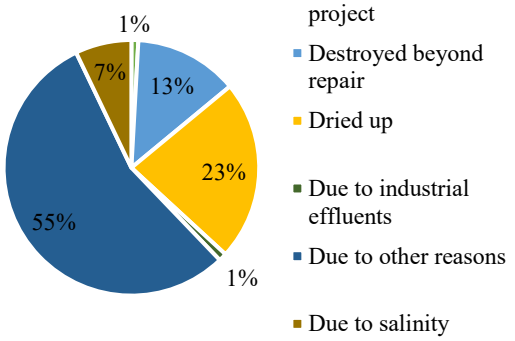
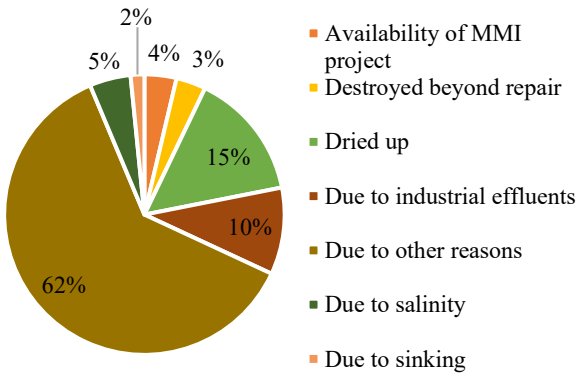


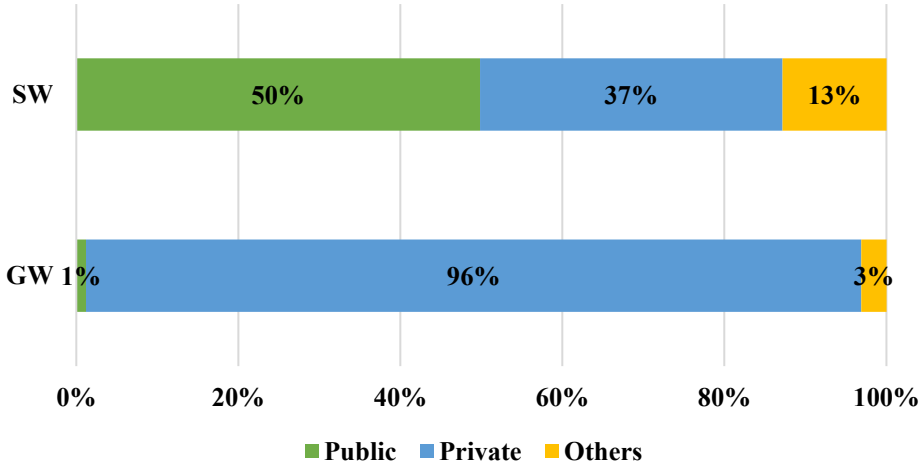
Chart 8.2.8: Distribution of Permanently Not in Use SW schemes



Ownership of MI Schemes

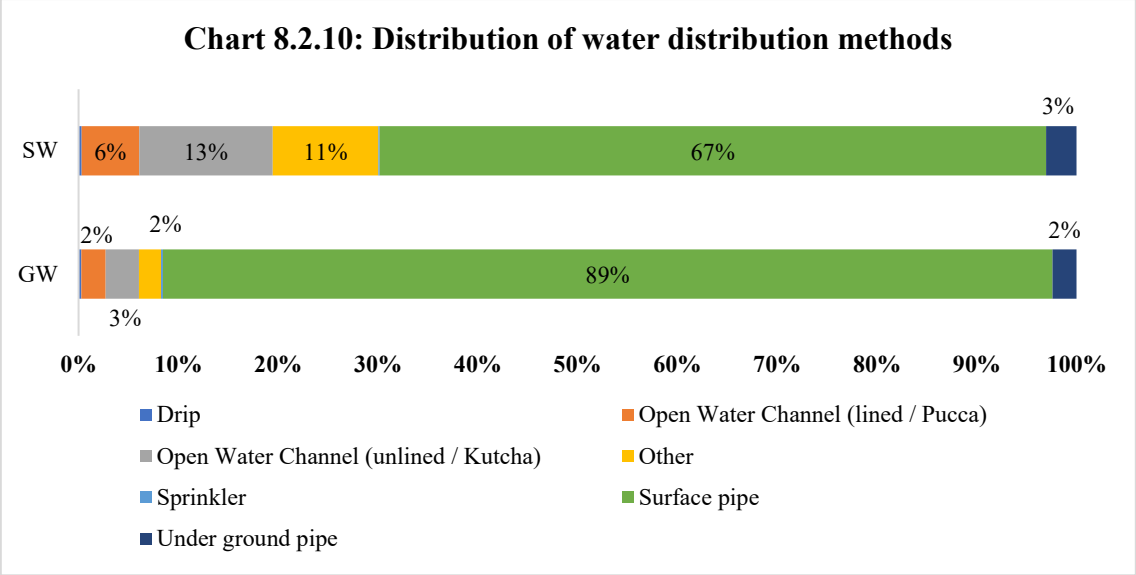
8.2.7 In surface water schemes, 50% are owned by public entities, 37% by private entities, and 13% by others. In contrast, groundwater schemes are predominantly privately owned (96%), followed by others (3%) and public entities (1%).

Chart 8.2.9: Type of ownership



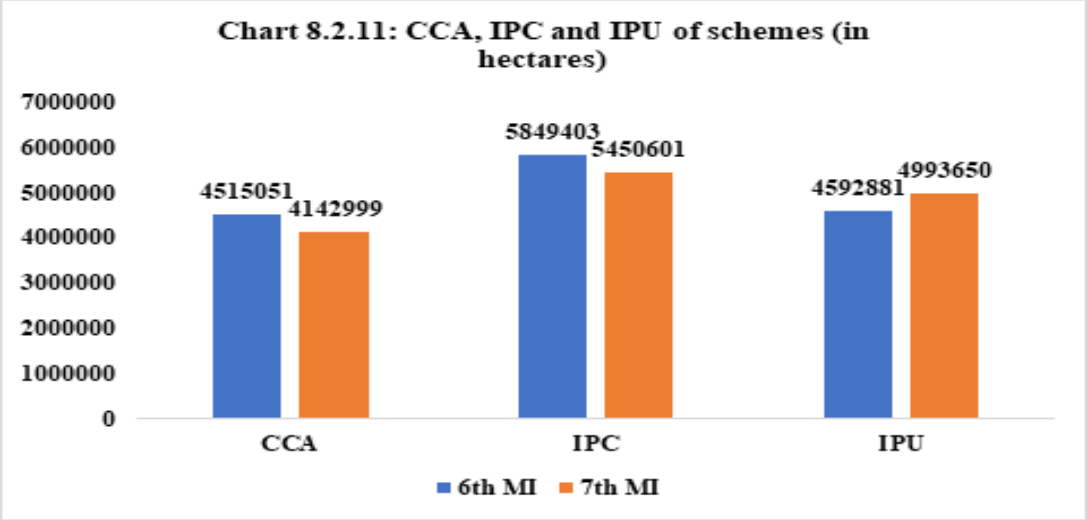
Water Distribution Methods:

8.2.8 Surface pipes are the primary method for water distribution in both groundwater (89%) and surface water (67%) schemes. In surface water schemes, open water channels (unlined/kutcha) are also used (13%) followed by lined/pucca channels (6%).



Culturable Command Area, Irrigation Potential Created (IPC) and Irrigation Potential Utilised (IPU)

8.2.9 There has been a decline in CCA and IPC in the State. However, IPU has increased by 9% which might be due to better use of surface pipes for water distribution and an increased number of schemes. The ratio of IPU to IPC in the State is 0.92 in the 7th MI Census, indicating that 92% of the created potential is utilised.



Underutilization of In-Use schemes

8.2.10 Out of 20,194 in-use surface water schemes, 7% are under-utilised, whereas out of 7,00,490 in-use ground water schemes, only 3% are under-utilised.

Drinking water purpose

8.2.11 Out of the total 7,33,575 minor irrigation schemes, 4% schemes are also used for drinking water purposes.

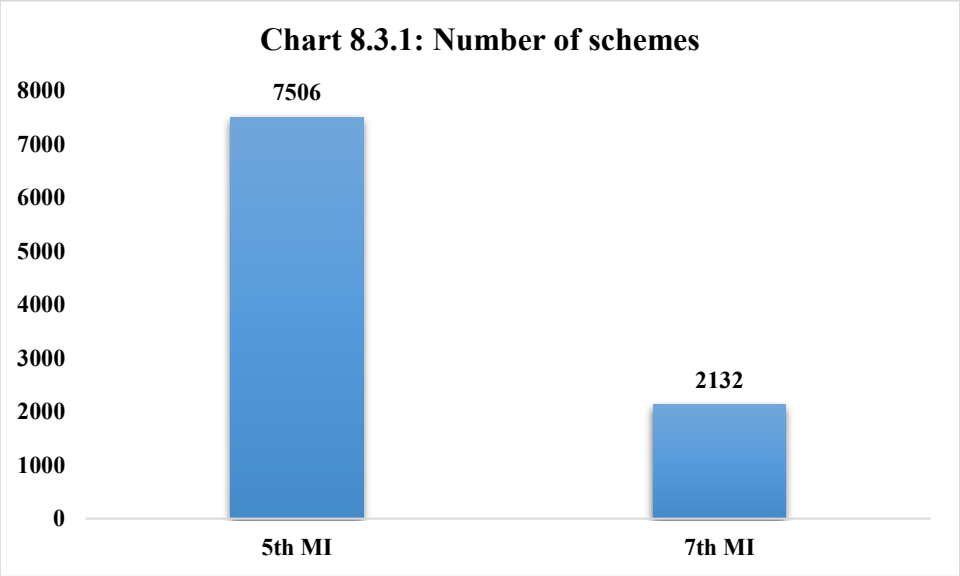
Table 8.2.1: Key Parameters of 7th MI Census – Bihar

Parameter		Unit	Value			%
Number of Schemes	Dug wells	No.	22,827			3.1
	Shallow Tubewell	No.	3,36,171			45.8
	Medium Tubewell	No.	3,03,564			41.4
	Deep Tubewells	No.	48,794			6.7
	Artesian Well	No.	947			0.1
	Ground Water schemes	No.	**7,12,303**			**97.1**
	Surface Flow	No.	10,091			1.4
	Surface Lift	No.	11,181			1.5
	Surface Water schemes	No.	**21,272**			**2.9**
	Total schemes	No.	**7,33,575**			**100**
			GW	**SW**	**Total**	
CCA, IPC and IPU	CCA	Ha	3929276	213724	4142999	
	IPC	Ha	5185039	265561	5450601	
	IPU	Ha	4750886	242764	4993650	
	IPC of in use schemes	Ha	5107379	259770	5367149	
	IPU of in use schemes	Ha	4715782	238954	4954736	
	% Ratio of IPU to IPC	%	92%	91%	92%	
	Gap in IPC and IPU	Ha	434153	22797	456950	
Ownership	Individual ownership	No.	664550	6100	670650	91.4
	Group of Farmers	No.	17340	1839	19179	2.6
	Public owned	No.	4698	8266	12964	1.8
	Co-Operative Owned	No.	945	202	1147	0.2
	Panchayat Owned		2790	2133	4923	0.7
	Others	No.	21980	2732	24712	3.4
	Total	No.	**712303**	**21272**	**733575**	**100.0**
Water Distribution methods (in-use and temporarily not in use)	Open Water Channel (Lined/ Pucca)	No.	17209	1207	18416	2.5
	Open Water Channel (unlined/ kutcha)	No.	23502	2791	26293	3.6
	Underground pipe	No.	16998	638	17636	2.4
	Surface Pipe	No.	629109	13951	643060	88.5
	Drip	No.	1970	66	2036	0.3
	Sprinklers	No.	1271	27	1298	0.2
	Others	No.	15712	2213	17925	2.5
	Total	No.	**705771**	**20893**	**726664**	**100.0**

8.3 DELHI

8.3.1 Delhi reported 2,132 Minor Irrigation (MI) schemes in the 7th Minor Irrigation Census. The State does not have any surface water schemes, and all existing schemes are groundwater schemes (Table 8.3.1)

8.3.2 Delhi did not participate in the 6th MI Census. A comparison with the 5th Minor Irrigation Census reveals a 72% decline in the number of groundwater schemes, reflecting a significant reduction since the previous census round. As reported by the State, the variation observed is due to urbanisation of rural villages, decline in agricultural activities, groundwater regulation measures and improved verification and geo-tagging in the current census round.



Type of Ground Water Schemes:

8.3.3 According to the 7th Minor Irrigation (MI) Census, of the 2,132 MI schemes recorded in the State, dug wells constituted 3.75%, and shallow tube wells accounted for 90.48% (**Table 9.1. 1**).

Table 9.1. 1: Type of GW Schemes

GW Scheme	Type of well	Number of schemes
Dug well	Dug well Pucca	2
	Dug-cum-bore well	78
	Total Dug Well	**80**
Tube well	Shallow Tube well	1,929
	Medium Tube well	11
	Deep Tube well	107
	Artesian Well	5
	Total Tube Well	**2,052**
Grand Total		**2,132**

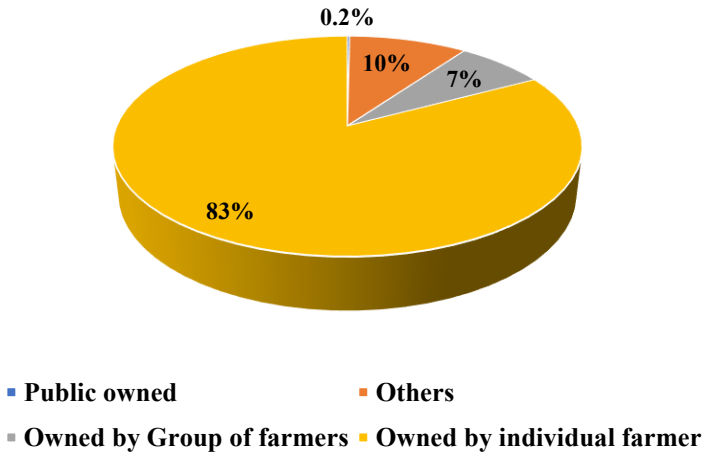
Status of MI Schemes:

8.3.4 Of the total 2,132 Minor Irrigation (MI) schemes, 2,131 are currently in use, with only one temporarily not in use scheme due to mechanical breakdown.

Ownership of MI Schemes

8.3.5 Out of the 2,132 schemes, 83% (1,766 schemes) were owned by individual farmers, 7% were owned by group of farmers, whereas only 0.2% schemed were owned by public authorities.

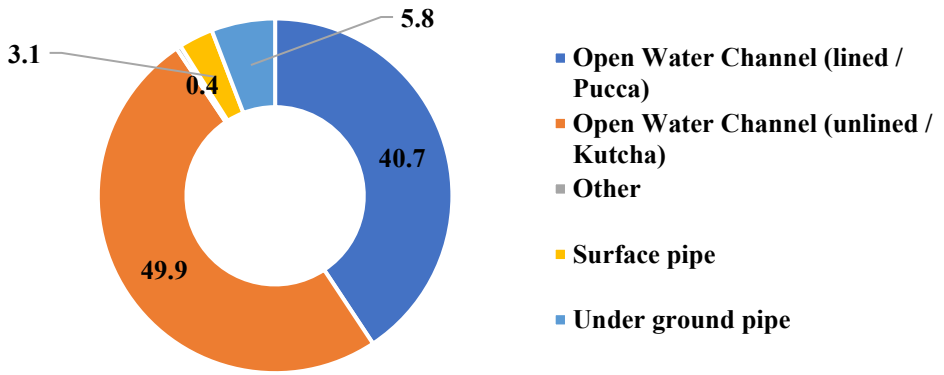
Chart 8.3.2: Ownership



Water Distribution Methods:

8.3.6 Use of open water channels is the prominent distribution method. Out of the 2,132 in use schemes (in-use and temporarily not in use), 49.9% schemes are using pucca or lined open water channels for distributing water for irrigation followed by 40.7% schemes are based on unlined or kutcha open water channels.

Chart 8.3.3: Distribution of water distribution methods



Culturable Command Area, Irrigation Potential Created (IPC) and Irrigation Potential Utilised (IPU)

8.3.7 CCA, IPC, and IPU have displayed significant declines in this round, owing to a reduction in the number of schemes due to urbanisation, decline in agricultural activities and groundwater regulation measures. The ratio of IPU to IPC in the State is recorded as 0.99 in the 7th MI Census, indicating that 99% of the created potential is utilised.

Chart 8.3.4: CCA, IPC and IPU of schemes (in hectares)

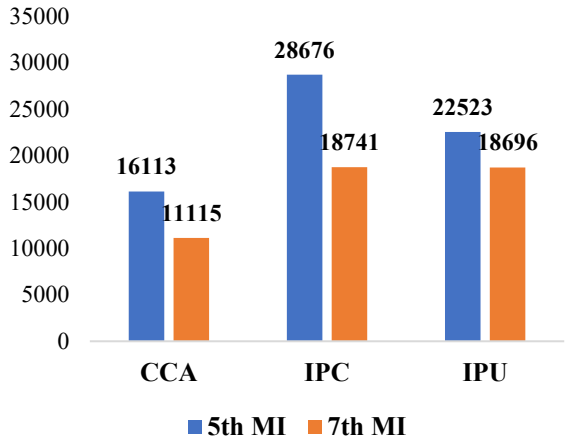
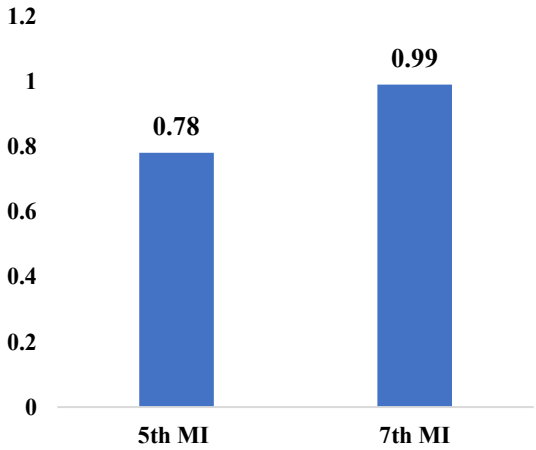


Chart 8.3.5 : Ratio of IPU to IPC



Underutilization of In-Use schemes

8.3.8 There are 2,131 in-use schemes, out of which 2% schemes are under-utilised.

Drinking water purpose

8.3.9 Out of the total 2,132 minor irrigation schemes, 0.2% schemes are also used for drinking water purposes.

Table 8.3.1: Key Parameters of 7th MI Census - Delhi

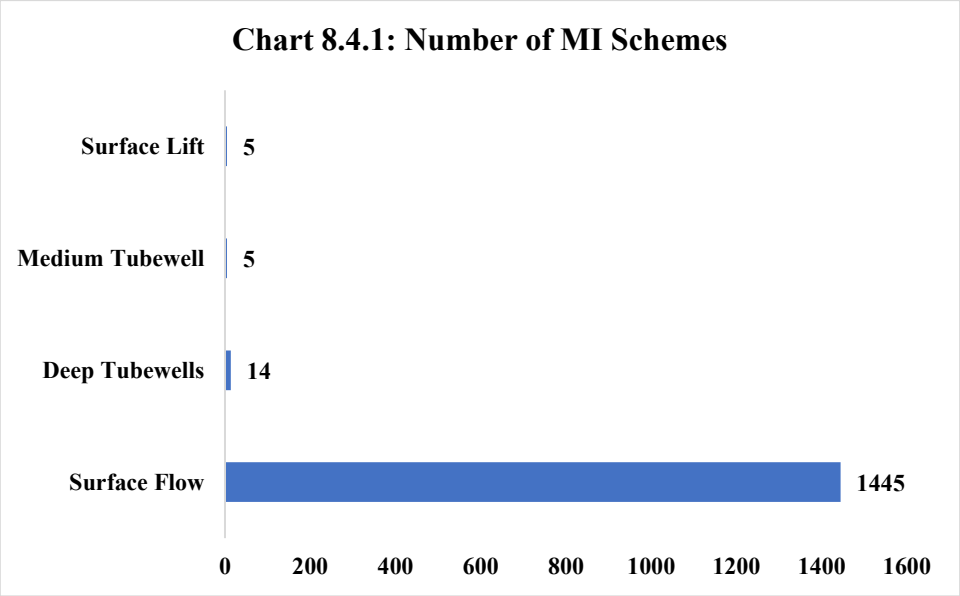
Parameter		Unit	Value	%
Number of schemes	Dug wells	No.	80	3.75
	Shallow Tubewell	No.	1,929	90.48
	Medium Tubewell	No.	11	0.52
	Deep Tubewells	No.	107	5.02
	Artesian Well		5	0.23
	Groundwater schemes	No.	**2,132**	100
	Surface Flow	No.	0	0
	Surface Lift	No.	0	0
	Surface Water schemes	No.	**0**	0
	Total schemes	No.	**2,132**	100
CCA, IPC and IPU	**CCA**	Ha	**11,115**	
	IPC	Ha	**18,741**	
	IPU	Ha	**18,696**	
	IPC of in use schemes	Ha	**18,739**	
	IPU of in use schemes	Ha	**18,694**	
	% Ratio of IPU to IPC	%	**99.7**	
	Gap in IPC and IPU	Ha	**45**	
Ownership	Individual ownership	No.	1,766	82.8
	Group of Farmers	No.	155	7.3
	Public owned	No.	4	0.2
	Others	No.	207	9.7
	Total	No.	**2,132**	100
Water Distribution methods (in-use and temporarily not in use schemes)	Open Water Channel (Lined/ Pucca)	No.	867	40.67
	Open Water Channel (unlined/ kutcha)	No.	1,064	49.91
	Underground pipe	No.	124	5.82
	Surface Pipe	No.	67	3.14
	Drip	No.	1	0.05
	Sprinkler	No.	0	0.0
	Others	No.	9	0.42
	Total	No.	**2,132**	100

8.4 LADAKH

8.4.1 Ladakh reported 1,469 Minor Irrigation (MI) schemes in the 7th Minor Irrigation Census (Table 8.4.1). Ladakh was covered under Jammu & Kashmir in the 6th MI Census, and hence no comparison with the previous census has been done.

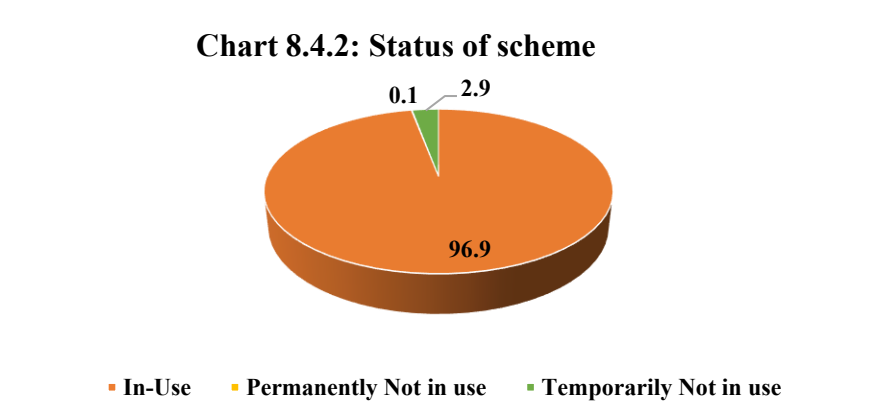
Type of MI Schemes:

8.4.2 According to the 7th Minor Irrigation (MI) Census, of the 1,469 MI schemes recorded in the State, 1.29% were groundwater schemes and 98.71% were surface water schemes.



Status of MI Schemes:

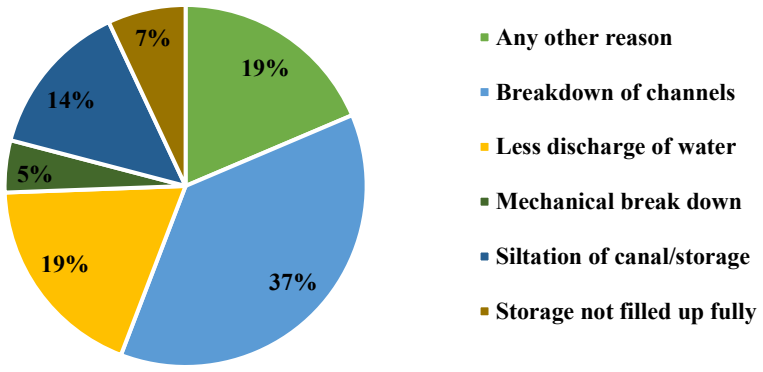
8.4.3 Out of the total 1,469 Minor Irrigation (MI) schemes, 96.9% (1,424 schemes) are currently in use, 2.9% (43 schemes) are temporarily not in use, and only 0.1% (2 schemes) are permanently not in use.



Reason for not in use schemes:

8.4.4 All schemes were currently operational in groundwater schemes. Under surface water schemes, channel breakdowns accounted for 37% of the 43 schemes temporarily not in use. Only two schemes under surface water schemes were permanently out of use- one due to drying up and the other due to other reasons.

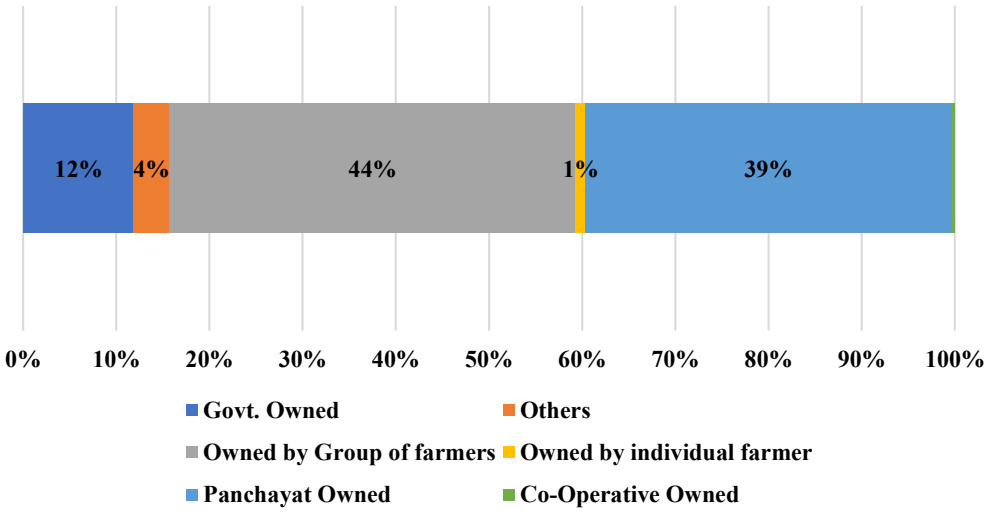
Chart 8.4.3: Distribution of Temporarily not in use in SW Schemes



Ownership of MI Schemes

8.4.5 Out of the 1,469 schemes, 44% (641 schemes) were owned by a group of farmers, 39% (577 schemes) were owned by a panchayat, whereas only 1% schemes were owned by individual farmers.

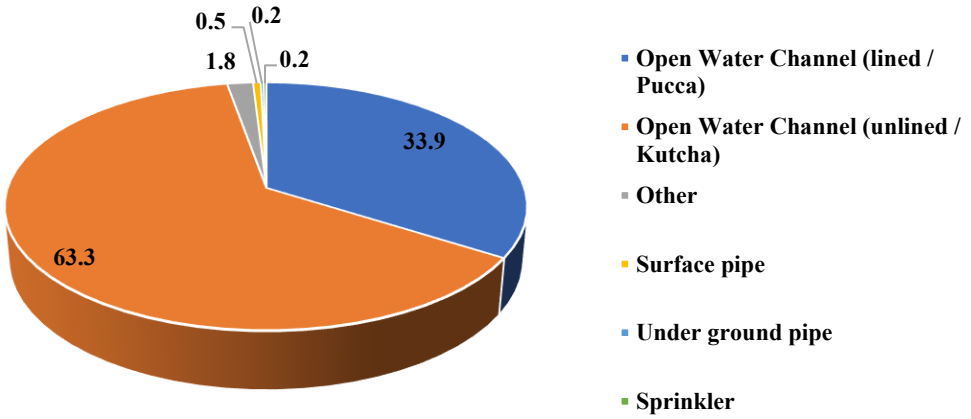
Chart: 8.4.4: Ownership



Water Distribution Methods:

8.4.6 Use of open water channels (unlined / kutcha) is the prominent distribution method. Of the 1,467 in-use schemes (in use and temporarily not in use), 63.3% use unlined or kutcha open water channels for irrigation, followed by 33.9% that use lined or pucca open water channels.

Chart 8.4.5: Water Distribution method



Culturable Command Area, Irrigation Potential Created (IPC) and Irrigation Potential Utilised (IPU)

8.4.7 Out of the 23,638 ha IPC created in the State, 20,136 ha have been utilised. The ratio of IPU to IPC in the State is recorded as 0.85 in the 7th MI Census. IPC created under the groundwater schemes has been fully utilised.

Chart 8.4.6: CCA, IPC and IPU of schemes (in hectares)

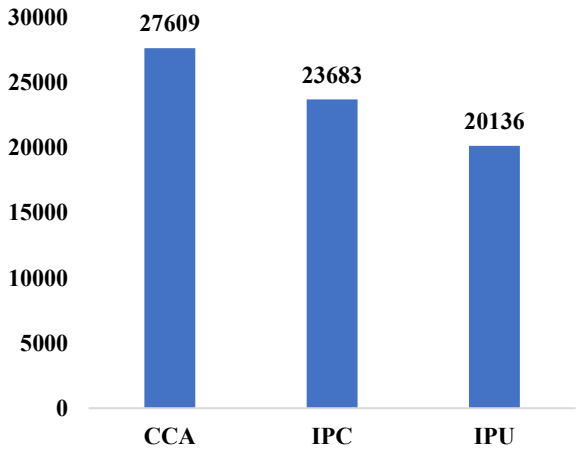
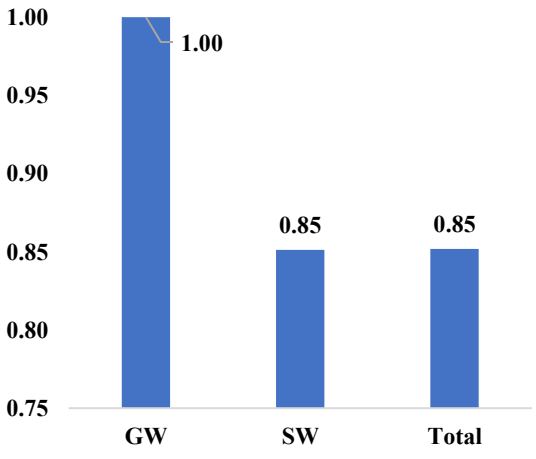
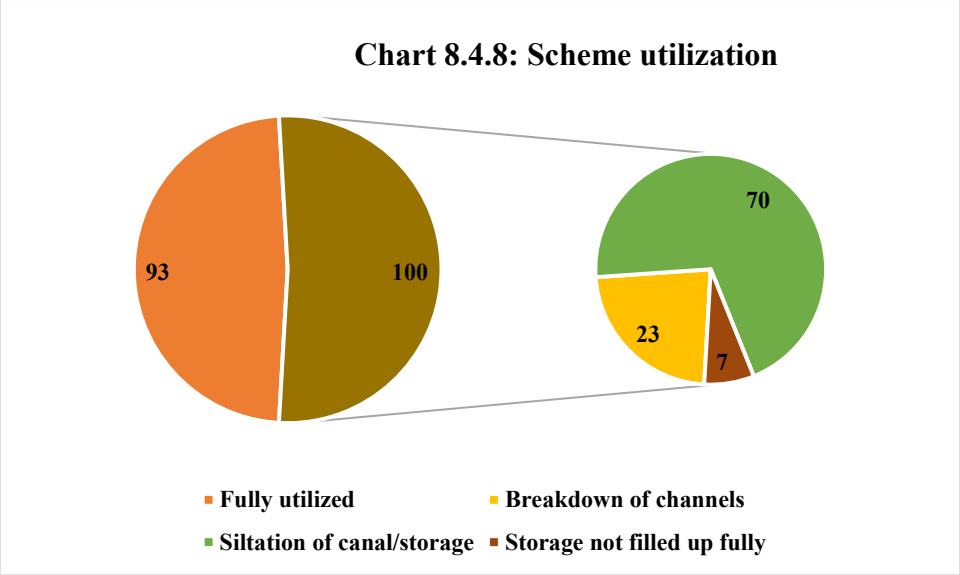


Chart 8.4.7: Ratio of IPU to IPC



Underutilization of In-Use schemes:

8.4.8 There are 1,424 in-use schemes, out of which 7% schemed are under-utilized. Out of the under-utilized schemes, the main reason for under-utilization is siltation of canal/storage (70%) followed by breakdown of channels (23%).



Drinking water purpose

8.4.9 Out of the total 1,469 minor irrigation schemes, 8.3% schemes are also used for drinking water purposes.

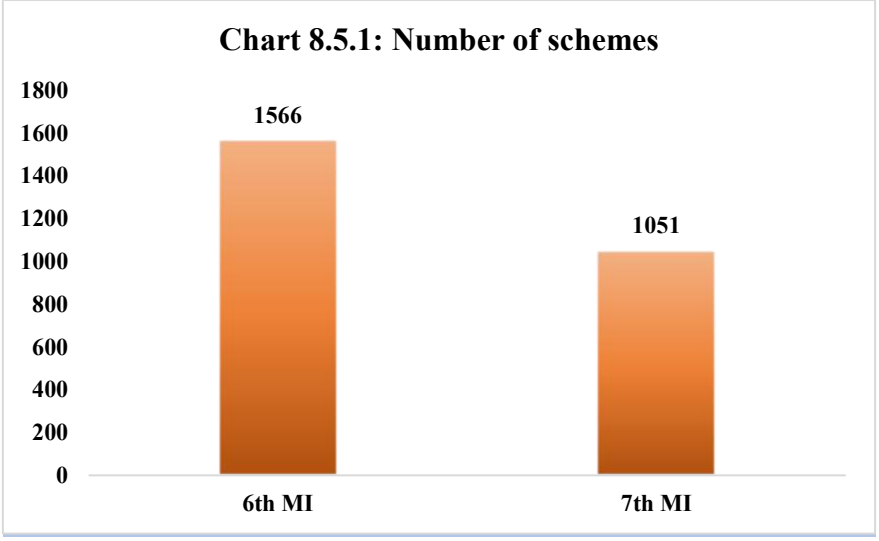
Table 8.4.1: Key Parameters of 7th MI Census - Ladakh

Parameter		Unit	Value			%
Number of schemes	Dugwells	No.	0			0
	Shallow Tubewell	No.	0			0
	Medium Tubewell	No.	5			0.34
	Deep Tubewells	No.	14			0.95
	Artesian Well		0			0.00
	Ground Water schemes	No.	**19**			**1.29**
	Surface Flow	No.	1445			98.37
	Surface Lift	No.	5			0.34
	Surface Water schemes	No.	**1450**			**98.71**
	Total schemes	No.	**1469**			
			GW	**SW**	**Total**	
CCA, IPC and IPU	CCA	Ha	209	27400	27609	
	IPC	Ha	114	23569	23683	
	IPU	Ha	114	20022	20136	
	IPC of in use schemes	Ha	114	23052	23166	
	IPU of in use schemes	Ha	114	19621	19735	
	% Ratio of IPU to IPC	%	100	85	85	
	Gap in IPC and IPU	Ha	0	3431	3431	
Ownership	Individual ownership	No.	0	15	15	1.0
	Group of Farmers	No.	6	635	641	43.6
	Public owned	No.	7	167	174	11.8
	Co-Operative Owned	No.	6	0	6	0.4
	Panchayat Owned		0	577	577	39.3
	Others	No.	0	56	56	3.8
	Total	No.	**19**	**1450**	**1469**	100
Water Distribution methods (in-use and temporarily not in use schemes)	Open Water Channel (Lined/ Pucca)	No.	4	494	498	33.9
	Open Water Channel (unlined/ kutcha)	No.	6	922	928	63.3
	Underground pipe	No.	0	3	3	0.2
	Surface Pipe	No.	6	2	8	0.5
	Drip	No.	0	0	0	0.0
	Sprinklers	No.	3	0	3	0.2
	Others	No.	0	27	27	1.8
	Total	No.	**19**	**1448**	**1467**	100

8.5 SIKKIM

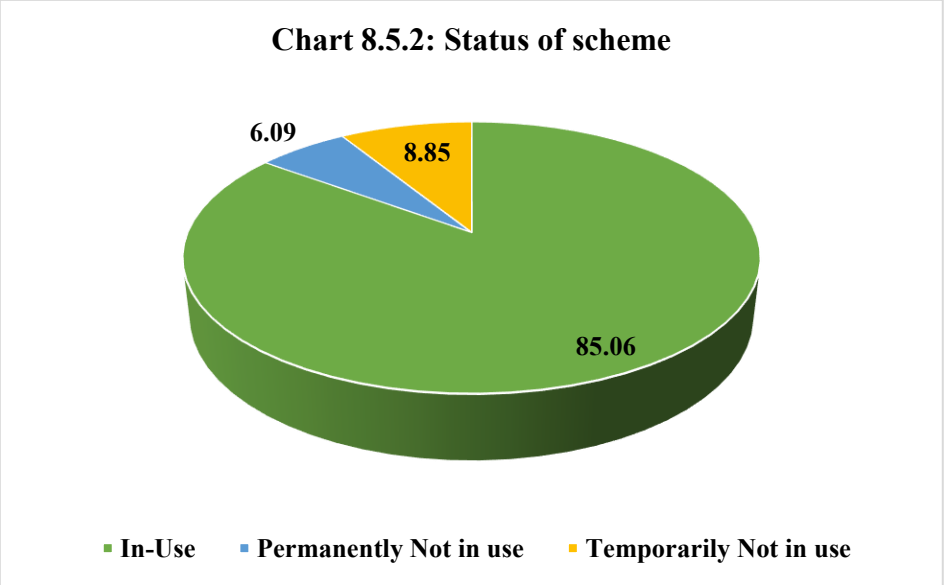
8.5.1 Sikkim reported 1,051 Minor Irrigation (MI) schemes in the 7th Minor Irrigation Census (Table 8.5.1). The State does not have any groundwater schemes; all existing schemes are surface-flow schemes.

8.5.2 A comparison with the 6th Minor Irrigation Census reveals a 32% decline in the number of surface water schemes, reflecting a significant reduction since the previous census round. As reported by the State, the variations observed are due to natural calamities, exclusion of permanently not in use schemes and land use changes.



Status of MI Schemes:

8.5.3 Out of the total 1,051 Minor Irrigation (MI) schemes, 85% (894 schemes) are currently in use, 8.85% (93 schemes) are temporarily not in use, and only 6.09% (64 schemes) are permanently not in use.



Reason for not in use schemes:

8.5.4 There are 93 temporarily not in use schemes, of which 50.5% were unused due to other reasons and 40% were unused due to the breakdown of channels. Out of the 64 permanently not in use schemes, 37.5% were dried up, 20% were destroyed beyond repair, and 36% were due to other reasons. Distribution of temporarily not in use and permanently not in use surface water schemes are given below:

Chart 8.5.3: Temporarily Not in Use

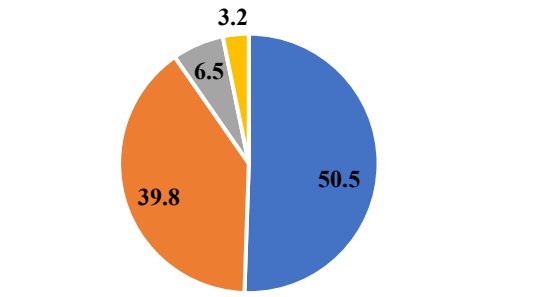
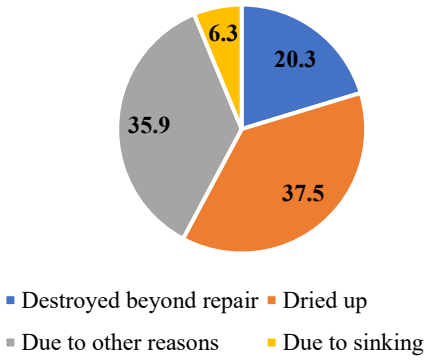


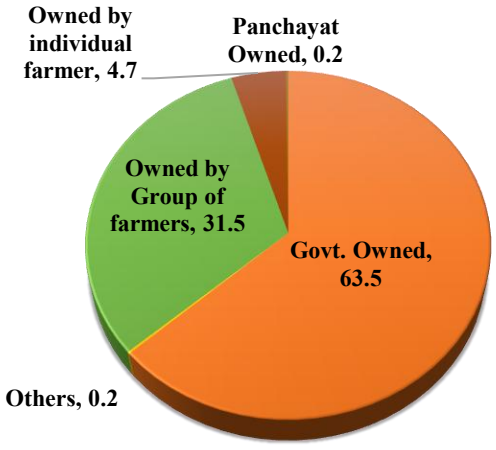
Chart 8.5.4: Permanently Not in Use



Ownership of MI Schemes

8.5.5 Many of the schemes were owned by public entities, followed by schemes owned by groups of farmers. Out of the 1051 schemes, 63.5% (667 schemes) were owned by the government, 31.5% were owned by group of farmers, whereas only 4.7% schemes were owned by individual farmers.

Chart 8.5.5: Ownership

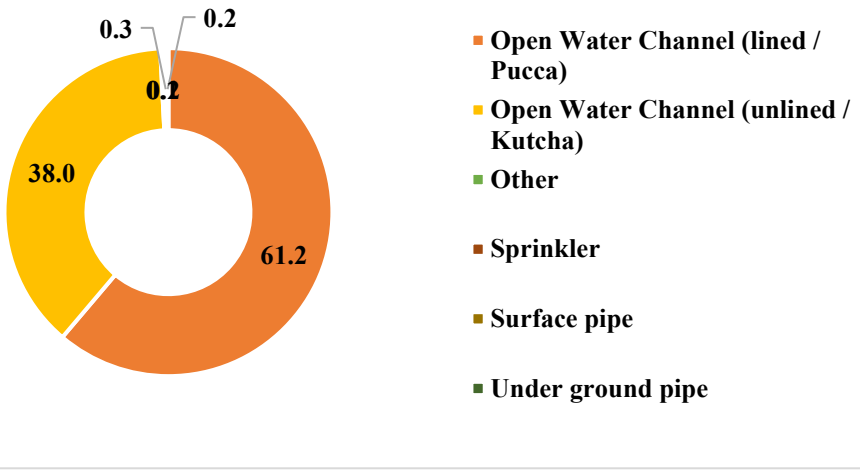


Water Distribution Methods:

8.5.6 Use of open water channels is the prominent distribution method. Out of the 987 in-use schemes (in-use and temporarily not in use), 61.2% schemes are using pucca or

lined open water channels for distributing water for irrigation, followed by 38% schemes that are based on unlined or kutcha open water channels.

Chart 8.5.6: Distribution of water distribution methods



Culturable Command Area, Irrigation Potential Created (IPC) and Irrigation Potential Utilised (IPU)

8.5.7 The number of schemes has declined by 32% compared to the previous round. Similarly, CCA, IPC, and IPU have decreased considerably in this round. The ratio of IPU to IPC in the State is 0.65 in the 7th MI Census, indicating that 65% of the created potential is utilised.

Chart 8.5.7: CCA, IPC and IPU of schemes (in hectares)

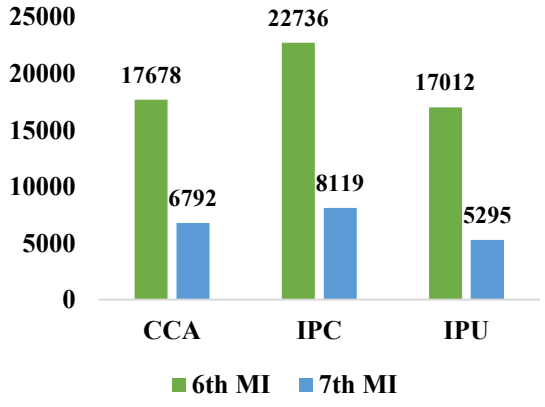
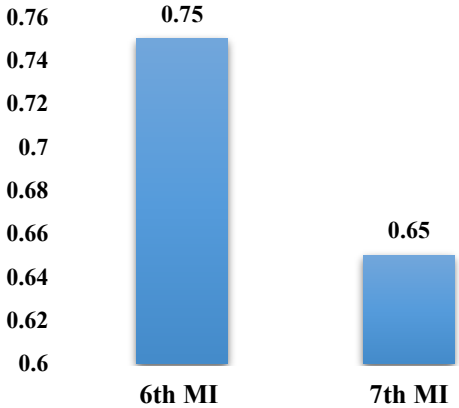


Chart 8.5.8: Ratio of IPU to IPC



Underutilization of In-Use schemes

8.5.8 There are 894 in-use schemes, out of which 7.9% schemes are under-utilised. Around 94% of schemes that were under-utilised cited channel breakdown as the major reason.

Drinking water purpose

8.5.9 Out of the total 1051 minor irrigation schemes, 7.3% schemes are also used for drinking water purposes.

Table 8.5.1: Key Parameters of 7th MI Census - Sikkim

Parameter		Unit	Value	%
Number of schemes	Surface Flow	No.	1,051	100
	Surface Lift	No.	0	0
	Surface Water schemes	No.	**1,051**	100
	Total schemes	No.	**1,051**	100
CCA, IPC and IPU	**CCA**	Ha	6,792	
	IPC	Ha	8,119	
	IPU	Ha	5,295	
	IPC of in use schemes	Ha	6,918	
	IPU of in use schemes	Ha	4,958	
	% Ratio of IPU to IPC	%	**65.2**	
	Gap in IPC and IPU	Ha	**2824**	
Ownership	Individual ownership	No.	49	4.7
	Group of Farmers	No.	331	31.5
	Public owned	No.	669	63.7
	Others	No.	2	0.2
	Total	No.	1,051	100
Water Distribution Methods (in-use and temporarily not in use schemes)	Open Water Channel (Lined/ Pucca)	No.	604	61.2
	Open Water Channel (unlined/ kutcha)	No.	375	38.0
	Underground pipe	No.	2	0.2
	Surface Pipe	No.	3	0.3
	Drip	No.	0	0.0
	Sprinklers	No.	2	0.2
	Others	No.	1	0.1
	Total	**No.**	**987**	**100**

9 SCHEDULE OF THE 7TH MINOR IRRIGATION CENSUS

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

SURFACE WATER SCHEMES **Code: 02**

I. IDENTIFICATION PARTICULARS

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

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

(e) Latitude _____ **Longitude**_____

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

II. SPECIFIC INFORMATION:

1. Serial Number of scheme :

2. Type of Scheme **Code:**

Surface Flow Scheme – 1, Surface Lift Scheme - 2

3.1 If code 1 in item 2, Nature of Surface Flow Scheme: **Code:**

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

3.2, If code 2 in item 2, Nature of Surface Lift Scheme: **Code:**

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

4. Owner of the Scheme (Name in case of individual farmer)

Name _____ **Code:**

Govt. owned - 1, Co-operative owned - 2, Panchayat owned - 3, Owned by Group of farmers - 4,
Owned by individual farmer - 5, Others – 9

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

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

(b) Social Status of Owner (in case of individual owner only) **Code:**

Scheduled caste -1 , Scheduled tribe – 2 , OBC- 3, Others 9

(c) Gender of Owner (in case of individual owner only)

Male-1, Female-2, Transgender-3 **Code:**

7. Year of Commissioning of the Scheme **Code :**

Upto 2018-19- 1, during 2019-20 - 2, during 2020-21 - 3, during 2021-22- 4
during 2022-23 - 5 , during 2023-24 - 6

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

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

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

9.(a) Major source of finance (upto 2) (For individual owners only) **Code :**

Bank loan - 1, Government fund - 2, Own savings - 3, Money lender - 4, Others - 9

9(b) .If any subsidy/assistance provided by Govt. / PSU , amount for (For All Schemes)

(i) Construction of Scheme/ digging **(Rs.)**

(ii) Cost of machinery/ distribution device **(Rs.)**

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10. Current Status of the Scheme

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

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

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

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

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

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

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

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

14. Types of lifting device (Only for Surface lift Scheme) ☐

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

15. Source of energy :(Only for Surface lift scheme) **Code :** ☐

Electric - 1, Diesel - 2, Wind Mills - 3, Solar - 4, Others - 9

16. Horse Power of Lifting device ☐☐.☐ **HP**

(ignore if lifting device is manual/animal)

17. Number of days pump operated (ignore, if lifting device is manual/animal)

During Kharif season ☐☐☐ **Days**

During Rabi season ☐☐☐ **Days**

For Perennial crop ☐☐☐ **Days**

During other season ☐☐☐ **Days**

18. Average hours of pumping per day (ignore, if lifting device is manual/animal)

During Kharif season ☐☐ **Hrs**

During Rabi season ☐☐ **Hrs**

For Perennial crop ☐☐ **Hrs**

During Other season ☐☐ **Hrs**

19 (a) Whether the scheme is located in the command of
Major/ Medium Schemes like Canals etc. **Code :** ☐

Yes --- 1

No --- 2

19(b) If Scheme is in command area i.e. code 1 in item 19(a),

(i) Name of the MMI Project_____

(ii) reasons for Scheme in Command Area of the MMI Project: **Code :** ☐

Water not available up to field from major/medium scheme-1,Water available but not adequate for irrigation-2

Water available but not useable for irrigation-3, Other reasons-9

19 (c) Whether the scheme is meant only for recharge of Ground water Yes-1, No-2 **Code:** ☐

(If yes **Keep item 20 to item 30 blank)**

20. Culturable Command Area | | | | | . | | | | **Ha.**

SEASON WISE IRRIGATION POTENTIAL CREATED (IPC)

21.	**Kharif**		Ha.
22.	**Rabi**		Ha.
23.	**Perennial**		Ha.
24.	**Other**		Ha.
25.	**Total**		Ha.

Season wise actual area irrigated during 2023-24 (IPU)

26.	**Kharif**		Ha.
27.	**Rabi**		Ha.
28.	**Perennial**		Ha.
29.	**Other**		Ha.
30.	**Total**		Ha.

Note (i) If Scheme is out side command area of Major & Medium Scheme then complete IPU is to be reported.
(ii) If the Scheme is in the Command of Major & Medium Scheme then IPU is to be given as supplemented by MI Scheme. Thus the Gross IPU is to be apportioned in the ratio utilised by Major/Medium and MI Scheme.

31(i) Whether the scheme is under utilised (Only for In-use Schemes) Yes-1,No-2 code:

31(ii) If yes i.e. code 1 in item 31(i) , reasons for under utilisation of schemes **Code :**

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

32. Number of Villages covered by the scheme

33. Specific features of Reservoirs,Tank,Other storages

(a) Designed Storage (in cubic metres) | | | | | . | | |

(b) Filled up Storage (during 2023-24) **Code :**

Full - 1 , upto 3/4 - 2 , upto 1/2 -3, upto 1/4 - 4 , Nil/Negligible filled up - 5

(c) Status of filling up of storage Space **Code :**

(based on around 50% filling up of storages during last 5 year)

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

34. Specific information releting to Water body

(a) 21 Digit Sl no. as per Water body schedule in which the scheme is functioning

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

(b) Total number of schemes in the village in above water body.

(c) Sl. number of this scheme within village in the water body

35. Whether the MI Scheme is used for 'Drinking Water' purpose? Yes-1, No-2 Code:

36. Whether the scheme was caputured in previous census? Yes-1, No-2 Code:

Checked by:
Name
Designation of the Suprevisory Officer
Mobile No.
Email:

Name of the Enumerator
Designation
Mobile No.
Email:

Annexure-4

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

GROUND WATER SCHEMES **Code: 03**

I. IDENTIFICATION PARTICULARS

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

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

(e) Latitude _____ **Longitude** _____

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

II. SPECIFIC INFORMATION:

1. Serial Number of scheme : [ ][ ][ ][ ]

2. Type of Scheme **Code:** [ ]
Dug well-1, Tube well/ Borewell-2

3.1. If code 1 in item 2 above, type of Dug well:
: Dug-cum-bore well -1, Dug well Pucca -2, Dug well Kutcha -3, Others - 9 **Code:** [ ]

3.2.If code 2 in item 2 above, type of Tube well:
Shallow Tube well-1, Medium Tube well-2, Deep Tube well-3, Artesian Well-4 **Code:** [ ]

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

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

(b) Location particulars /Land Mark _____

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

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

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

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

8. Details of the scheme
(a) Depth of the Dug well/Tube well (in meters) [ ][ ][ ].[ ][ ] Mtr
(b) Diameter **(In metres for dug well and mm for tube well)** [ ][ ].[ ][ ]
(c) Depth of Bore (in metres) **(in case of Dug-cum-borewell)** [ ][ ].[ ][ ] Mtr
(d) Distance from any nearest Dug well/Tube well (in meters) [ ][ ][ ][ ].[ ][ ] Mtr

9. (a) Cost of construction of the scheme **(Rs.)** [ ][ ][ ][ ][ ][ ][ ]
(b) Cost of machinery **(Rs.)** [ ][ ][ ][ ][ ][ ][ ]
(c) Cost of maintenance during (2023-2024) **(Rs.)** [ ][ ][ ][ ][ ][ ][ ]

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

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

11. Current Status of the Scheme

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

(b) If code 2 or 3 in item 11(a), No. of years not in use ☐

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

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

13 . If code 3 in item 11 (a), reason for Permanently "not in use" **Code:** ☐

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

14. Method used for Water distribution **Code :** ☐

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

15. Types of lifting device ☐

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

16. Source of energy for lifting device **Code :** ☐

Electric - 1, Diesel - 2, Wind Mills - 3, Solar - 4, Manual/animal - 5, Others -9

17. Horse Power of Lifting device ☐☐.☐ **HP**

(ignore if lifting device is manual/animal driven)

18. Number of days pump operated (ignore, if lifting device is manual/animal)

During Kharif season ☐☐☐ **Days**
During Rabi season ☐☐☐ **Days**
For Perennial crops ☐☐☐ **Days**
During Other Season ☐☐☐ **Days**

19. Average hours of pumping per day (ignore, if lifting device is manual/animal)

During Kharif season ☐☐ **Hrs**
During Rabi season ☐☐ **Hrs**
For Perennial crops ☐☐ **Hrs**
During Other Season ☐☐ **Hrs**

20 (a) Whether the scheme is located in the command of Major/ Medium Schemes like Canals etc. **Code :** ☐

Yes --- 1
No --- 2

20(b) If Scheme is in command area i.e. code 1 in item 20(a),

(i) Name of the MMI Project:_____

(ii) reasons for Scheme in the Command Area of the MMI Project **Code :** ☐

Water not available up to field from major/medium scheme-1,Water available but not adequate for irrigation-2
Water available but not useable for irrigation-3, Other reasons-9

20 (c) Whether the scheme is meant only for recharge of Ground water Yes-1, No-2 ☐

(If yes **Keep item 21 to item 31 blank)**

21. Culturable Command Area ☐☐☐☐.☐☐☐ **Ha.**

Season Wise Irrigation Potential Created (IPC)

22.	**Kharif**	**Ha.**
23.	**Rabi**	**Ha.**
24.	**Perennial**	**Ha.**
25.	**Other**	**Ha.**
26	**Total**	**Ha.**

Season wise actual area irrigated during 2023-24 (IPU)

27.	**Kharif**	**Ha.**
28.	**Rabi**	**Ha.**
29.	**Perennial**	**Ha.**
30.	**Other**	**Ha.**
31.	**Total**	**Ha.**

Note (i) If Scheme is out side command area of Major & Medium Scheme then complete IPU is to be reported.
(ii) If the Scheme is in the Command of Major & Medium Scheme then IPU is to be given as supplemented by MI Scheme. Thus the Gross IPU is to be apportioned in the ratio utilised by Major/Medium and MI Scheme.

32(i) Whether the scheme is under utilised (Only for In-use Schemes) Yes-1,No-2 code:

32(ii) If yes i.e. code 1 in item 32(i) , reasons for under utilisation of schemes **Code :**
Non availability of adequate power/fuel – 1 , Mechanical break down – 2 ,
Less discharge of water - 3 , Non availability of finance-4, Lack of Maintenance-5
Any other reason-9

33. Whether the MI Scheme is used for 'Drinking Water' purpose? Yes-1, No-2 Code:
34. Whether this Scheme was captured in previous census? Yes-1, No-2 Code:

Checked by
Name
Designation of the Supervisory Officer
Mobile No.
Email:

Name of the Enumerator
Designation
Mobile No.
Email:

SEVENTH CENSUS OF MINOR IRRIGATION SCHEMES
REFERENCE YEAR 2023-24 (AGRICULTURAL YEAR)
VILLAGE SCHEDULE **Code: 04**

I. IDENTIFICATION PARTICULARS

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

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

(e) Date of Enumeration: (DD/MM/YY) | | - | | | - | | |

II. SPECIFIC INFORMATION:

1. Is Village Tribal/ Non-Tribal ? **Code :** |
Tribal – 1 , Non-Tribal -2

2. (a) Is the Village covered by Major/ Medium Scheme **Code :** |
Yes -1, No - 2

(b) If yes, Name of Major/ Medium Scheme _____
(The information in items 3 to 7 of this schedule shall be based on village records)

3. Geographical Area In Whole number | | | | | | **Ha.**

4. Cultivable Area In Whole number | | | | | | **Ha.**

5. Net sown Area In Whole number | | | | | | **Ha.**

6. Gross Irrigated Area(By all sources) In Whole number

(i) During Kharif Season | | | | | | **Ha.**

(ii) During Rabi Season | | | | | | **Ha.**

(iii) For Perennial crops | | | | | | **Ha.**

(iv) During Other Season | | | | | | **Ha.**

(v) Total Gross Area Irrigated (Item 6 (i)+6(ii)+6(iii)+6(iv) | | | | | | **Ha.**

7. Net Area Irrigated (By all sources) In Whole number | | | | | | **Ha.**

8. Average Ground Water level (in Metres)

(i) Pre Monsoon) | | | | **Mtrs**

(ii) Post Monsoon) | | | | **Mtrs**

9. Whether Water Users association (WUA) exists in the village

Yes -1, No -2, Not known-3 Code : |

10 Summary of Number of Water bodies as per water body Schedules filled in the village

Pond	Tank	Lake	Reservoirs	Water conservation Schemes/percolation tanks/check-dams	Others	Total (Col. 1 to 6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

11. Summary of M I Schemes in the village as per all scheme schedules filled.

(i) Ground Water Schemes No. | | | |

(ii) Surface Water Schemes No. | | | |

(iii)Total Schemes No. | | | |

Checked by:
Name:
Designation of Supervisory officer:
Mobile No.:

Name:
Designation of Enumerator :
Mobile No:

सत्यमेव जयते

DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA
REJUVENATION MINOR IRRIGATION
(STATISTICS) WING 2ND FLOOR,
B WING, LOK NAYAK BHAWAN, NEW DELHI
MISTAT-MOWR@GOV.IN





