National Institute of Urban Affairs

Sanitation Capacity Building Platform

In collaboration with

Ecosan Services Foundation

BORDA SOUTH ASIA

PARVAT-MANTHAN

*Manifestation of Clean and Sustainable Hill States*

# Rapid Assessment of

# WATER AND SANITATION IN HILL STATES

## Title
Rapid Assessment of Water and Sanitation in Hill States


## Publisher
National Institute of Urban Affairs, New Delhi

## Research Project
Sanitation Capacity Building Platform (SCBP)



## Authors
**National Institute of Urban Affairs (NIUA)**
Shantanu Kumar Padhi, Amita Pathria, Laila Khan Khongthaw and Dr Mahreen Matto

**Ecosan Services Foundation (ESF)**
Radhika Boargaonkar, Dhawal Patil and Saurabh Kale

**Bremen Overseas Research and Development Association- South Asia (BORDA-SA)**
Snehit Prakash, Jeevan Roy and Anju Varghese

## Mentor
Hitesh Vaidya, Director, National Institute of Urban Affairs
Stanzin Tsephel, Regional Director, BORDA-SA
Tikender Panwar, Former Deputy Mayor of Shimla

## Graphic Design
Design Team, NIUA





## CONTACT
National Institute of Urban Affairs
1st and 2nd floor Core 4B,
India Habitat Centre,
Lodhi Road, New Delhi 110003, India
Website: www.niua.org, scbp.niua.org
E-Mail: scbp@niua.org

National Institute of Urban Affairs

Sanitation Capacity Building Platform

In collaboration with

ecosan SERVICES FOUNDATION

BORDA SOUTH ASIA

PARVAT-MANTHAN

*Manifestation of Clean and Sustainable Hill States*

# Rapid Assessment of

# WATER AND SANITATION IN HILL STATES

# Contents

# Acknowledgement

We would like to express our sincere gratitude and appreciation to all individuals and organizations who have contributed to the development of this report on the 'Rapid Assessment of Water and Sanitation in the Hill States'. Your valuable insights, expertise, and support have been instrumental in shaping the content and ensuring its quality.

First and foremost, we extend our heartfelt thanks to Bill and Melinda Gates Foundation for their funding and support, without which this initiative would not have been possible. Their commitment to improving the management of faecal sludge from onsite sanitation systems—including safe containment, collection, transport to treatment, and safe disposal or reuse of waste- which also aims for sanitation services to be equitable, serve the needs of the urban poor and women, and support citywide inclusive sanitation systems. This has made a significant impact in advancing our understanding and addressing the challenges related to Water and Sanitation in the Hills.

We would also like to express our deep appreciation to the team of researchers, analysts, and experts of the SCBP, Ecosan Services Foundations and BORDA-SA who worked tirelessly to gather, analyze, and interpret the data and information presented in this report. Your dedication and professionalism have been invaluable in producing accurate and reliable insights. We extend our heartfelt gratitude to the Design team for their outstanding work in producing this report with an appealing design that effectively communicates its content.

Furthermore, we are grateful to especially, Smt Roopa Mishra, Joint Secretary, Swachh Bharat Mission, Ministry of Housing and Urban Affairs, Shri Deepak Sanan, Former IAS and all the eminent participants of the Consultation Meetings held in Leh, Ladakh and Gangtok, Sikkim in the year 2022 and Secretaries of the Urban Development Directorates of 10 States and 2 Union Territories who generously shared their knowledge, experiences, and perspectives during interviews, workshops, and consultations. Your valuable input has enriched the report and provided real-world insights that will contribute to meaningful change in the field of Water and Sanitation in the Hill States.

We would also like to acknowledge the support and guidance received from Mr Hitesh Vaidya and Dr Mahreen Matto. Their expertise and constructive feedback have helped shape the report and ensure its relevance and rigour. Your collective efforts have made a significant contribution to advancing knowledge, fostering dialogue, and driving positive change in the realm of Water and Sanitation in Hills.

# Abbreviations

| | |
|---|---|
| ABR | Anaerobic Baffled Reactor |
| ADB | Asian Development Bank |
| AMRUT | Atal Mission for Rejuvenation and Urban Transformation |
| Capex | Capital Expenditure |
| C&D | Construction and Demolition |
| CPCB | Central Pollution Control Board |
| CPHEEO | Central Public Health and Environmental Engineering Organization |
| CSP | City Sanitation Plan |
| CWIS | City Wide Inclusive Sanitation |
| DPR | Detailed Project Report |
| FSS | Faecal sludge and septage |
| GoI | Government of India |
| IHR | Indian Himalayan Region |
| IHHL | Individual Household Latrine |
| IPCC | Intergovernmental Panel on Climate Change |
| KLD | Kilo Liters per Day |
| MOHUA | Ministry of Housing and Urban Affairs |
| MoJS | Ministry of Jal Shakti |
| MLD | Million Liters per Day |
| MRF | Material Recovery Facility |
| NGO | Non-Governmental Organizations |
| NITI Aayog | National Institution for Transforming India |
| NIUA | National Institute of Urban Affairs |
| O&M | Operation and Maintenance |
| ODF | Open Defecation Free |
| Opex | Operating Expenditure |
| OSS | On-Site Sanitation |
| PPE | Personal Protective Equipment |
| SBM | Swachh Bharat Mission |
| SDG | Sustainable Development Goals |
| SHG | Self Help Group |
| STPs | Sewage Treatment Plants |
| SWM | Solid Waste Management |
| ULBS | Urban Local Bodies |
| WHO | World Health Organization |

# List of Figures



# List of Tables

# Glossary

**Circular Economy -** is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible.

*- European Parliament, 2023*

**Climate Change -** Climate change refers to long-term shifts in temperatures and weather patterns, which may be natural or of man-made origin.

*- United Nations Development Programme, 2023*

**Citywide Inclusive Sanitation (CWIS)** focuses on providing urban areas with access to and benefits from adequate and sustainable sanitation services, including the safe, effective, and sustainable management of all human waste along the whole sanitation service chain.

*- Asian Development Bank*

**Ecosystem -** is a geographic area where plants, animals, and other organisms, as well as weather and landscapes, work together to form a bubble of life.

*- National Geographic, 2023*

**Indigenous -** The term indigenous implies those systems that are conveyed formally and informally among kin groups and communities through social encounters, oral traditions, ritual practices, and other activities.

*- University of Pennsylvania, 2014*

**Indian Himalayan Region (IHR)** - is the section of the Himalayas within the Republic of India, spanning thirteen Indian states and union territories, namely Ladakh, Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, West Bengal, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, Assam, and Arunachal Pradesh

*- National Institution for Transforming India (NITI Aayog)*

**Microclimate -** s a local set of atmospheric conditions that differ from those in the surrounding areas, often slightly but sometimes substantially.

*- National Centre for Biotechnology Information, 2021*

**Nature-based Solutions -** Nature-based solutions are actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously benefiting people and nature.

*- International Union for Conservation of Nature, 2022*

**Resilience -** The capacity of individuals, communities, institutions, businesses and systems within a city to survive, adapt and grow no matter what kinds of chronic stresses and acute shocks they experience.

*- Resilient Cities Network, 2022*

**Sustainability -** is defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

*- United Nations Brundtland Commission, 1987*

**Used Water management :** Sewage (Used Water) Used Water comprises of the following two components: Grey Water from kitchens, bathrooms, wash basins etc. Black Water from toilets & urinals. These may sometimes be mixed with other municipal flows such as surface water and storm water. Management of Used Water includes collection, conveyance, treatment & recycling/ disposal of all the above stated flows.

*- SBM 2.0*

# EXECUTIVE SUMMARY

The report on the 'Rapid Assessment of Water and Sanitation in Hill States ' is designed to be a living document that will undergo periodic publication at regular intervals, typically once every two years. This approach allows for updates and revisions to reflect the evolving situation and progress in the field of water and sanitation in hilly regions. By publishing the report regularly, stakeholders can stay informed about the current state of water and sanitation, track changes over time, and identify areas that require further attention and improvement.

The report covers 11 states[1] of the north and north eastern region of India. The report is prepared as a part of advocacy to address and develop inclusive, resilient and sustainable urban ecosystems in the Indian Himalayan Region (IHR) of the country. The report deep dives into collating the data pertaining to geography and topography, climatic conditions, demography, administrative details, land use cover, access to water, sanitation and solid waste management and municipal finances. The geography and topography of the region are peculiar and pose various challenges to the technical feasibility of solutions for water, solid and liquid waste management. The states also have a large tracts of land under forest which acts as a carbon sink and plays an important role in mitigating the impact of climatic change.

The report relies on the Census 2011 (Urban) as the base information for parameters such as population, tap water supply, and types of sanitation facilities. However, it acknowledges that this data is outdated and may not accurately reflect the current situation. To overcome this limitation, the report incorporates up-to-date information related to amenities at a city-wide scale, such as the number of Sewage Treatment Plants (STPs) and scientific landfills. This up-to-date information is readily available through central ministries' websites and mission dashboards, ensuring that the report includes the most recent data regarding these specific aspects. By combining the Census 2011 as base information with the up-to-date data on key amenities, the report aims to provide a more comprehensive and nuanced understanding of the state of water and sanitation in hilly regions, considering both the limitations of the base data and the availability of recent information on specific parameters.

Water and sanitation is a state subject in India meaning that the responsibility for implementation, planning, and management of water and sanitation programs primarily lies with the respective state governments. While data from the central government and its associated ministries may be readily available, gathering up-to-date information at the state level and making it accessible to the public can require extended support and coordination. State governments may face various challenges in collecting and disseminating timely and accurate data on water and sanitation. These challenges can include limited resources, technical capacity, and coordination issues. As a result, the availability of up-to-date information at the state level may vary, and there might be a need for assistance to ensure that the gathered data is reliable and accessible to the public.

[1] *Jammu, Kashmir and Ladakh union territories erstwhile Jammu and Kashmir state; the data from the respective territories are disaggregated in the report. The current study could not covered part of West Bengal state and there is no specific rationale behind this exclusion. It is planned to cover the other hill regions in the future endeavours of the forum.*

In order to address this, it is crucial for the central government and relevant institutions (academia, research institutes, non-profit organisations, etc) to collaborate with state governments, providing them with the necessary support and resources to gather, analyze, and publish up-to-date information on water and sanitation. This can involve capacity-building initiatives, technical assistance, and the development of standardized reporting frameworks to streamline data collection and reporting processes.

By fostering stronger collaboration and support between the central and state governments, efforts can be made to ensure that the public has access to accurate and up-to-date information on water and sanitation, enabling informed decision-making and effective planning for sustainable water and sanitation services across the country.

## Status of Water and Sanitation

The hill states in the IHR have relatively good access to piped water supply, with an average of 68% of urban households having this facility, according to Census 2011. And as per the dashboard data (current) available on the Ministry of Jal Shakti (MoJS) website, an average 72.58 % of rural households have piped water supply. Similar real-time data is not available for urban households. Moreover, there is a significant dependence on groundwater in some states like Assam, Mizoram, Nagaland, and Meghalaya. Manipur has the highest percentage of households accessing water directly through surface water bodies.

The proximity to water sources indicates the effort and time invested by households to access water. Uttarakhand has the highest percentage of households with piped water supply within their premises. However, Nagaland and Manipur have poor proximity to water sources, where access to water largely depends on surface water bodies.

The hill states in the IHR generally have better access to toilets, with an average of 92% of urban households having individual household toilets. It is noteworthy that all the states in the region have been declared Open Defecation Free (ODF) under the Swachh Bharat Mission.

The states in the region show varying degrees of collection and conveyance of wastewater. Some states, such as Himachal Pradesh and Uttarakhand, with 59% and 45 % have the highest number of urban households connected to drainage networks, while others like Assam and Tripura have a higher percentage of households managing wastewater on-site.

There is a significant gap between the total sewage generation (3086 MLD) and the total treatment capacity (1033 MLD) in the region, indicating a shortage in the infrastructure to effectively treat the generated sewage. Himachal Pradesh has a treatment capacity higher than the sewage generated in the state, followed by Uttarakhand but, several states, including Arunachal Pradesh, Assam, Meghalaya, Mizoram, and Nagaland, have no installed treatment capacity or a few coming-up treatment plants, suggesting a lack of infrastructure for treating sewage in these areas.

Tripura is the only state reporting the reuse of treated wastewater for purposes such as watering city parks, gardens, and roads. Other states discharge treated wastewater into surface water bodies to maintain environmental flow in the rivers.

This data highlights that, on average, 87% of the wards in the states under the IHR have access to door-to-door waste collection services. This means that waste collection personnel visit individual households or premises to collect solid waste directly. As a result of this widespread door-to-door collection, a cumulative

amount of 5190 tons per day (TPD) of solid waste is collected across these states. This figure represents the total amount of solid waste collected daily from households and premises in the covered wards.

It is worth noting that the specific states under the IHR and their respective waste management systems may vary. This data suggests that the door-to-door waste collection service has been implemented effectively in these states, leading to a significant collection of solid waste from households and contributing to proper waste management practices. Further analysis can be conducted to assess the efficiency, sustainability, and environmental impact of the waste management system in place, as well as potential areas for improvement or expansion of waste collection services.

The states of IHR have a higher percentage of female workers compared to the national average in India. Eight out of the eleven states in the IHR have a female working population that exceeds India's average of 12%. This suggests that women in the IHR states are actively participating in the workforce, potentially due to factors such as cultural norms, social empowerment initiatives, educational opportunities, and regional economic conditions. Further analysis can shed light on the specific sectors where women are employed and the implications for women's empowerment and gender equality in the region.

The state of Himachal Pradesh has the highest municipal revenue INR 4460 per capita in the IHR, close to India's average of INR 4624 per capita. Nagaland has the lowest municipal revenue per capita with INR 238 per capita. Similarly, Himachal Pradesh has the highest municipal expenditure per capita with INR 5335 per capita, while Arunachal Pradesh has the lowest with INR 76 per capita. These disparities reflect variations in financial capacity and resource allocation for municipal services among the states.

Overall, the hill states in the IHR have made significant progress in providing access to water and sanitation facilities, particularly individual household toilets. However, there are variations in terms of proximity to water sources, management of wastewater, and treatment infrastructure. Efforts should be directed towards improving wastewater treatment capacity, promoting water reuse, and ensuring sustainable water and sanitation practices across the region.

# 1

# ABOUT INDIAN HIMALAYAN REGION

Himalayas are the world's youngest mountain ranges, tectonically alive, and one of the most marginalized mountain regions of the world. The Indian Himalayan Region (IHR) is the section of the Himalayas within the republic of India, spanning Indian State and Union Territories, namely Ladakh, Jammu Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, Meghalaya, Assam, Tripura, Mizoram, Manipur, Nagaland, Arunachal Pradesh, and West Bengal. The Region stretches along 2,500 km covering 5.3 lakh km$^2$ and nearly 50 million (as per NITI Aayog, 2022) people reside in this region, which is characterized by a diverse demographic, and versatile economic, environmental, social, and political systems.

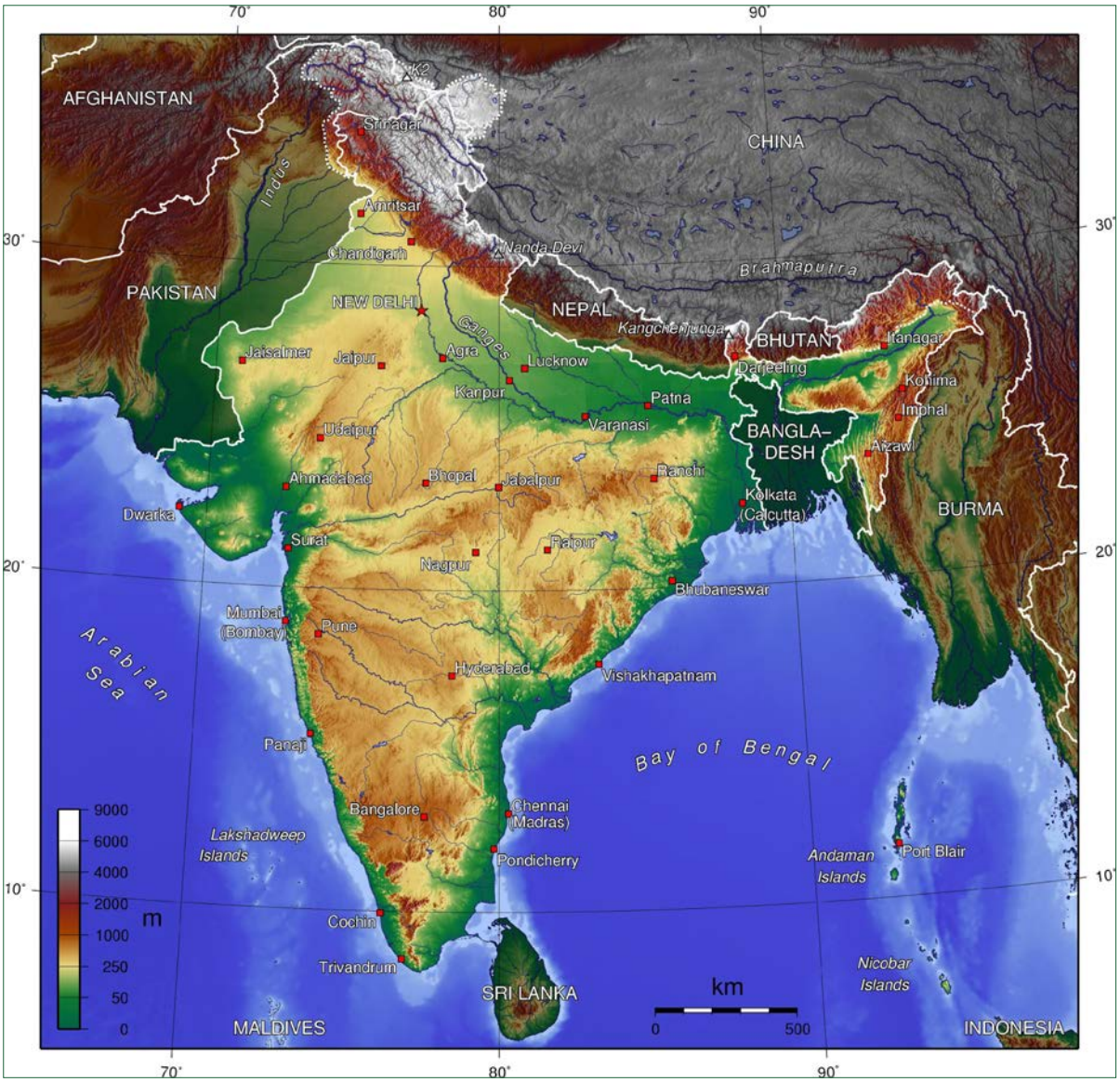



**Figure 1: Indian Himalayan Ranges and Rivers (Source: National Mission on Himalayan Studies, 2017)**

The region influences weather, economy, energy sources, river, and tourism of the Indian Subcontinent. The region is responsible for providing water to a large part of the Indian Subcontinent.

## Rivers

Most of the major rivers in India originate in the region. The Indus, Chenab, Jhelum, Ravi, Beas, Saraswati, Ganges, Sutlej, Brahmaputra and Yamuna rivers all begin their journey in the mountain range, providing water for people to drink and wash in, and use for growing their crops and raise animals. These rivers are perennial are in nature.

**Figure 2: Indus river flowing towards Kargil from Leh (Image Credit: Jeevan/BORDA)**

## Tourism

Tourism affects the lives of people in the Region, and it is largely due to the mountains themselves. Each year, people from all over the world come to scale these famous mountains as part of personal and religious pilgrimages. This has come with rewards and drawbacks. The increased number of tourists visiting the Himalayas as sightseers and trekkers has boosted employment in the region.

## Forest

The State of Forest Report (FSI, 2011) estimates that forests cover around 41% of the geographical area of the IHR, with 16.9% of the area being covered by very dense forest, 45.4% by moderate forest, and the remaining 37.7% by open forest. The region is richly endowed with forest resources and supports different types of forest ecosystems along with varied topography. It is remarkable for its diversity of plants and animals and provides abundant ecosystem services to people. The vast green cover in the region also acts as a carbon sink.

**Figure 3: Lush green forest of great Himalayas, Kullu, Himachal Pradesh (Image Credit: Jeevan/BORDA)**

## Economy

The economy of the Indian subcontinent is highly affected by the presence of Himalayan Mountain Range. The dry air of the valley of Kashmir is perfect for growing saffron, which is highly prized worldwide. The area also has vineyards in which grapes are grown to make wine and brandy, and orchards of almonds, and walnuts which are exported out of India. The Kullu valley of Himachal Pradesh is famous for its apples, peaches, pears, and cherries. The IHR is also home to tea estates, cardamom plantations and other medicinal herbs used in ayurvedic medicines.

**Figure 4: Hampta Pass, a popular trek route taken by tourist; connects Kullu to Lahaul (Image Credit: Jeevan/BORDA)**

is also rich in minerals which includes sapphires, alluvial gold, copper, iron ore, borax, sulphur, coal, bauxite, mica, gypsum, graphite, lead, and zinc.

## Energy

Apart from providing life-giving water to people on the Indian subcontinent, the rivers in this region also generate electricity. The Himalayan rivers were first harnessed for this purpose in the 1950s. One of the biggest hydroelectric projects in the Himalayas was built in 1963 at Bhakra-Nangal on the Sutlej River found in the Outer Himalayas. Because of the power of the Himalayan rivers, people in the region and across have been able to live with the benefits of electricity that may have been difficult to bring to the region otherwise.

**Figure 5: View of Tehri hydro power dam, Uttarakhand (Image Credit: Shantanu/NIUA)**

## Weather

The Region has a significant effect on the weather of the Indian Subcontinent. The Himalayan Range stops cold continental air traveling from the north into India during winters. It creates conditions for heavy precipitation on the Indian side of the range. The rain from the south-westerly winds falls in India before moving north over the Range.

## Urbanization and Its Impact

In the past few decades, urbanization has emerged as one of the major drivers of global environmental change, transforming IHR where urbanization has been rapid but mostly unsystematic, unplanned, and unregulated. Uncontrolled demand-driven economic growth has resulted in haphazard urbanization, environmental degradation, and increased risks and vulnerabilities, seriously jeopardising the unique values of Himalayan ecosystems.

Unplanned construction activities have caused large-scale land instabilities, the drying up of natural water sources, waste disposal issues, and changes in socio-cultural values.

IHR's urbanization consists of sprawling small towns with populations of less than a lakh. Unplanned urbanization is altering land use and land cover significantly. Rapid unplanned growth of hill towns,

construction activities without proper planning, general non-compliance with prescribed norms and guidelines, and indiscriminate use of land for commercial outfits/tourist resorts have severely and adversely affected the IHR.

Deforestation has caused ecological damage and slope instability in the IHR. The forests are also under pressure due to the changing climate. Significant changes in temperature, precipitation, and vegetation have been observed. A significant reduction in suitable habitat and a massive decline in the population of animal species due to climate change is also predicted.

Climate change has also led to increased rainfall variability. In addition to affecting precipitation, high intensity rainfall events such as cloud bursts have resulted in landslides and flooding. In places like Uttarakhand, Jammu and Kashmir and Assam, heavy rainfalls and glacial outburst trigger landslides and floods that eventually devastate communities and infrastructure. As a result, the economy suffers from stagnation and forced migration.

The continued expansion of urban settlements, and influx of visitors, trekkers, and mountaineers in the Himalayan region has begun to pose high biotic pressure and has also stressed the region's resources, and its natural environment. Anthropogenic pollution, such as solid waste, disposal of untreated sewage, and local air pollution from vehicles, has been steadily increasing in the IHR in the absence of proper management practices and inadequate infrastructure.

**Figure 6: View of Kargil town valley located at an elevation of 8,780 ft (Image Credit: Jeevan/BORDA)**

# 2 KEY FACTS AND FIGURES

The report provides key facts and figures about the hilly states of the Indian Himalayan Region (IHR). It covers various aspects such as state profiles, climatic conditions, demography, administrative details, land use, access to water and sanitation, solid waste management, and municipal finances. The data includes information on population, elevation, temperature, precipitation, population growth rate, population density, sex ratio, working population, urban areas, forestry and agriculture, water access, sanitation, waste management, and municipal revenue.

## State profile

There are 11 states and 2 UT in IHR (excluding West Bengal). The spread of the region is approximately 4.3 Lakh sqkm of area. The largest states in the IHR are Arunachal Pradesh (83,743 $km^2$) followed by Assam (78,438 $km^2$). The average elevation is highest in Jammu and Kashmir (2,717 m above MSL) and lowest in Tripura (65 m above MSL).

## Demography and population growth rate:

The IHR region accommodates a total population of 73 million. Assam has the highest population (3.12 crore), followed by Jammu and Kashmir (1.22 crore. Nearly 30% of the population live in urban area which is in line with national average of 31.6%. Mizoram has the highest proportion of urban population (52.11%). Meghalaya has the highest population growth rate (27.90%), followed by Arunachal Pradesh (26%). Except for Assam (398 persons/$km^2$), the Himalayan states have relatively low population densities when it is compared with India's average population density of 382 per sq km and decadal growth of 17.72%

## Sex ratio

The sex ratio in the Himalayan states is higher than India's average (940 females per 1000 males). Meghalaya has the highest sex ratio (989). Other states with high sex ratios include Manipur (985), Mizoram (976), Himachal Pradesh (972), Uttarakhand (963), Tripura (960), and Assam (958).

## Working population

The average percentage of main workers in the IHR is 30%, which matches India's average. Mizoram and Sikkim have the highest percentage of main workers (38%), while Tripura has the lowest (9%). Female working population in the IHR is higher than the national average, with Himachal Pradesh and Nagaland having the highest percentages (22% and 20% respectively).

## Urban local body in IHR

Due to geographical and terrain constraint, the IHR states have fewer larger cities, ULB's. There are 17 city corporations with average population density of 5,055 persons per $km^2$ , compared to 228 and 162 Municipal Councils and Nagar Panchayats with average population density of 2,662 and 3,430 persons per km2 respectively

## Access to water

The average access to piped water supply in the IHR is 68%. Uttarakhand has the highest percentage of households with piped water supply (85%). Some states rely heavily on groundwater, such as Assam, Mizoram, Nagaland, and Meghalaya, while Manipur has the highest access to water through surface water bodies (27%).

## Sanitation:

- **Access to toilet:** On average, 92% of households in the IHR have individual household toilets and rest are dependent on shared/community toilet. All states in the IHR have been declared Open Defecation Free under the Swachh Bharat Mission.

- **Collection and conveyance:** States in IHR are largely dependent on-site sanitation system covering nearly 80% of the households, whereas 20% of households are connected to closed sewer systems. Assam has the highest on-site sanitation system (55%), followed by Tripura (53%). Uttarakhand and Himachal Pradesh have the highest percentages of households connected to drainage networks (92%).

- **Waste water management:** The total sewage generation in IHR is 3,086 MLD. he total capacity of the treatment infrastructure in the IHR states is 1033 MLD; out of which 884 MLD (86%) is the capacity of installed infrastructure and 149 MLD (14%) is the capacity of proposed infrastructure. Out of the installed treatment capacity, only 590 MLD (67%) is the operational capacity and 260 MLD (29%) is capacity of the infrastructure under-construction. The infrastructure with a treatment capacity of 34 MLD (4%) is non-operational.

## Solid waste management

On average, 87% of wards in the IHR have door-to-door waste collection. The cumulative collection of solid waste in the region is 5,190 TPD. The average percentage of waste scientifically processed is 44%, with Jammu and Kashmir having the highest rate (75%). Uttarakhand has the highest number of scientific landfills (30), followed by Jammu and Kashmir (27). There are 224 unscientific dumpsites across IHR.

## Municipal revenue

Average municipal revenue of ULB's in hilly states is INR 1729.4 per capita whereas the national average is INR 4624 per capita. Himachal Pradesh has the highest municipal revenue per capita (INR 4,460) and Nagaland has the lowest with INR 238 per capita. Average contribution to municipal revenue through own revenues and property taxes revenue is at 7.2% in comparison to 14.9%, national average for FY 2017-18

# 3

# STATE-WISE RAPID ASSESSMENT

Section 3 of the report is designed to present qualitative data in a visually engaging format, making it easier for readers to comprehend. To achieve this, state-wise profiling has been carried out to effectively articulate the information.

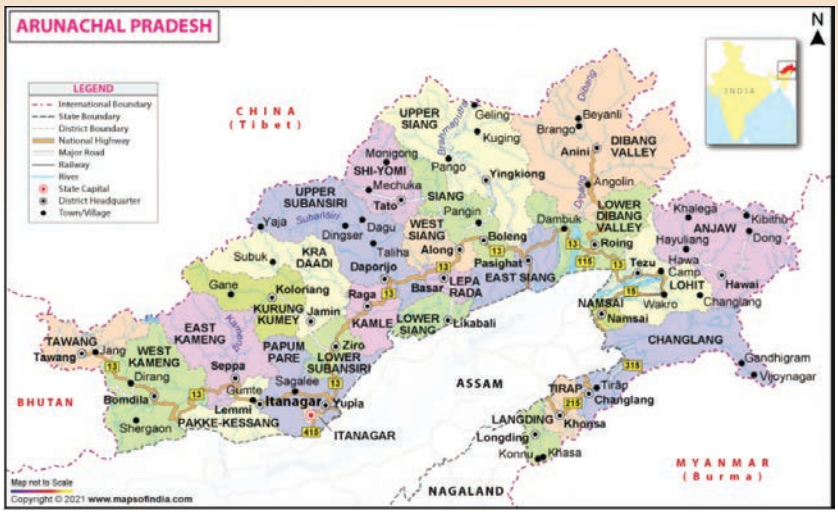

**Figure 7: Map of north and north eastern states of India selected for rapid assessment**

**Source: NIUA**

# Arunachal Pradesh

| | |
|---|---|
| Capital | Itanagar |
| Districts | 26 |
| Area | 83,743 km$^2$ |
| Total Population (2011) | 13,83,727 |
| Density | 17 persons/km$^2$ |
| Elevation | 533.95 m above MSL |

*Source: Various*




## Geography

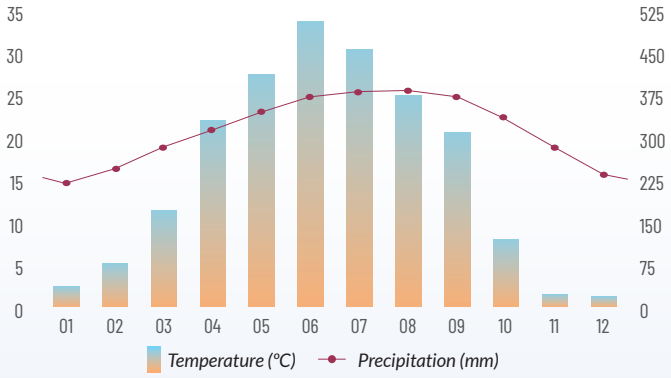
Arunachal Pradesh is the remotest state and the first Indian state to greet the rising sun with a geographic area of 83,743 km$^2$. Located on the north eastern tip of India between 26.28° N and 29.30° N latitude and 91.20° E and 97.30° E longitude, with its borders touching China, Bhutan, and Burma (Myanmar), Arunachal Pradesh is the largest of the Seven Sister States of Northeast India by area. Arunachal Pradesh shares a 1,129 km border with China's Tibet Autonomous Region. The state's terrain consist of deep valleys and ridges that rise to the peaks of the Great Himalayas.

## Climate

Arunachal Pradesh has a humid subtropical, dry winter climate. Climate varies with elevation.

| | |
|---|---|
| Yearly average temperature | 25.08°C |
| Annual precipitation | 170.79 mm |
| Rainy days | 188 rainy days |

*Source: Various*

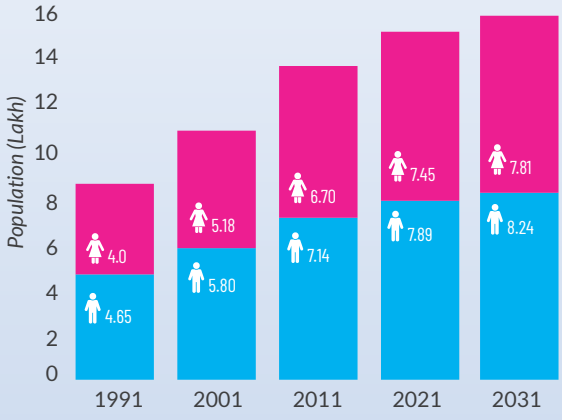



## Demography

As per census 2011, 22.94 % of the total population resides in urban areas and 77.06 % resides in rural areas.

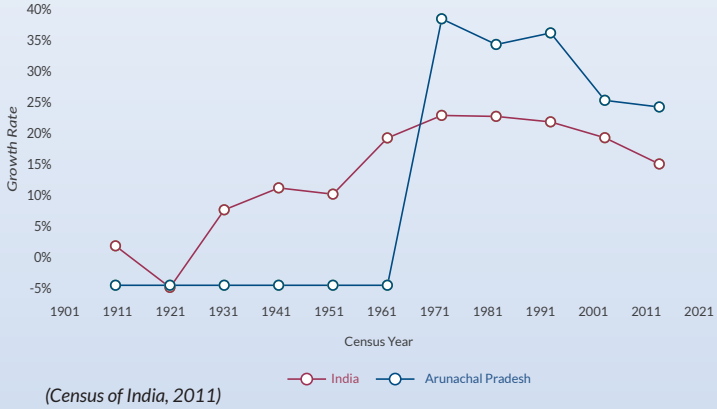
### Sex Ratio


### Population



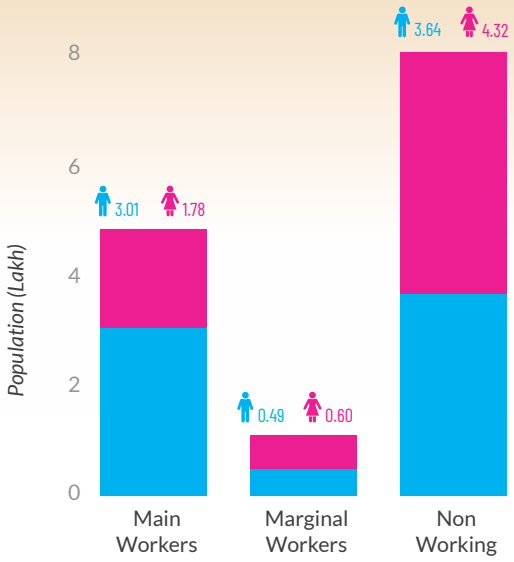

*(Ministry of Health & Family Welfare, 2020)[2]*

### Decadal Variation



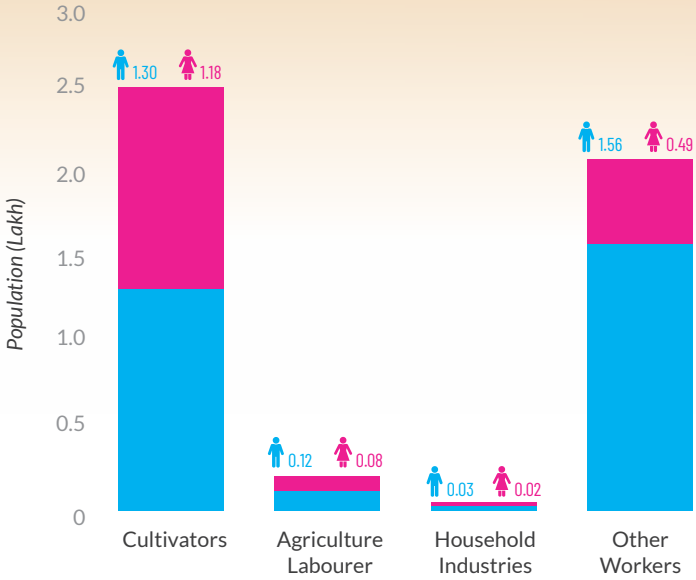

*(Census of India, 2011)*

## Working & Non Working Population

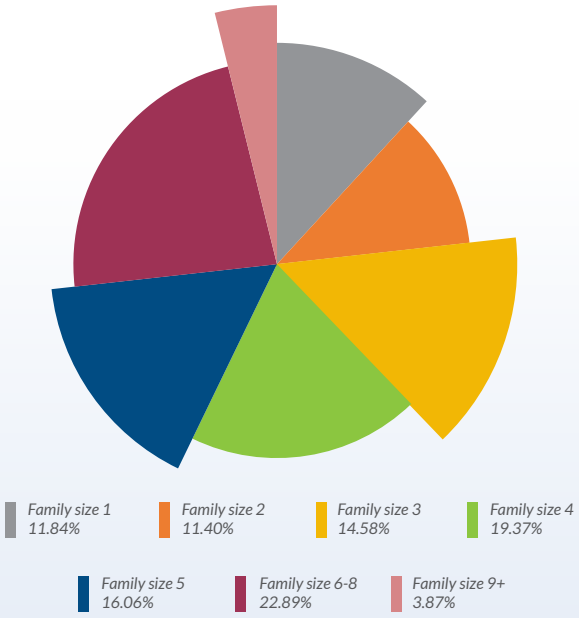



(Census of India, 2011)

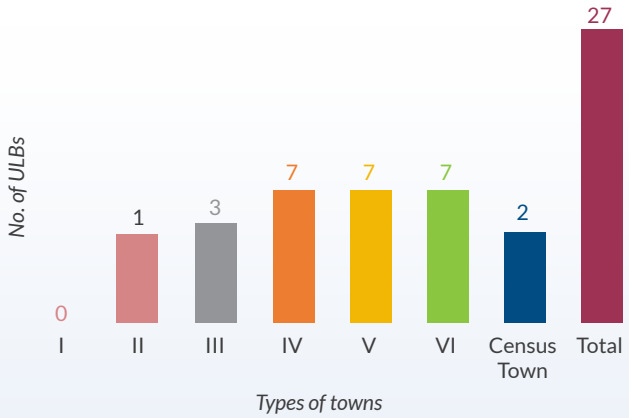
## Main Workers




## Family Size




## Class of Towns




(Census of India, 2011)

## Urban Local Body (ULB)

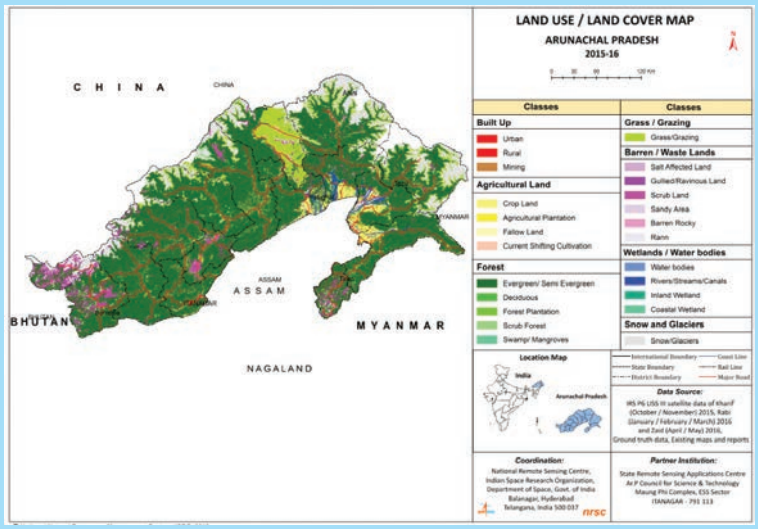
| Municipal Corporations | | | |
|---|---|---|---|
| Number | 0 | Area (sq.km.) | 0 |
| Population (Lakh) | 0 | Population Density (persons/sq/km.) | 0 |

| Municipal Councils | | | |
|---|---|---|---|
| Number | 2 | Area (sq.km.) | 61.65 |
| Population (Lakh) | 1.2 | Population Density (persons/sq/km.) | 1,946.5 |

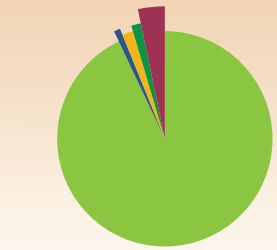
| Nagar Panchayats | | | |
|---|---|---|---|
| Number | 0 | Area (sq.km.) | 0 |
| Population (Lakh) | 00 | Population Density (persons/sq/km.) | 0 |

*(Indian Council for Research on International Economic Relations, 2019)[3]*

# Land use




*(ISRO, 2019)*



93% Forests
1% Not under Cultivable Land
3% Net sown area
2% Uncultivable land excluding Fallow Land
1% Total Fallow Land

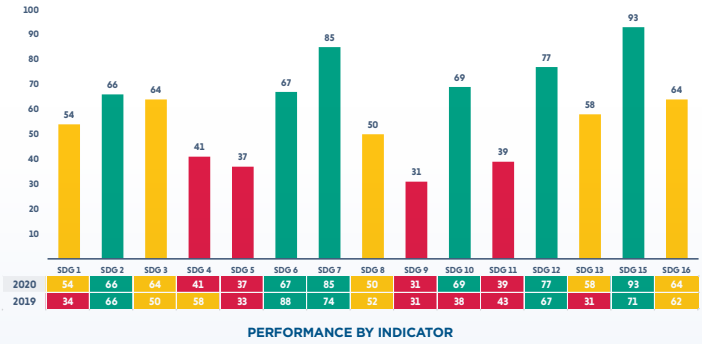
| | |
|---|---|
| Geographical Area (Thousand Hectares) | 8,374 |
| Area for Land Utilisation Statistics (Thousand Hectares) | 7,172 |

*(Ministry of Agriculture and Farmers Welfare, 2021)[1]*

# SDG Status

The SDG India Index and Dashboard is a crucial tool in India's SDG monitoring efforts. Designed and developed by NITI Aayog, the Index measures the progress at the national and sub-national levels towards meeting the Global Goals and targets


## Performance by Indicator



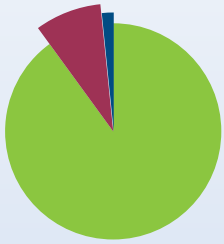

*(NITI Aayog and United Nations, 2021) [7]*

# Access to Water Supply

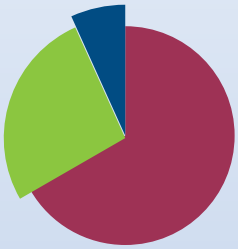
Indicators: ↑Highest ↓Lowest

Itanagar is having 85% piped water supply as per State Annual Action Plan (SAAP) 2017-18 and AMRUT mission target is 100% piped water supply.

## State Scenario



*Piped Water Supply 89.98%* *Groundwater 8.41%* *Surface Water Body 1.61%*



*Near Premises 26.57%* *Within Premises 66.69%* *Away 6.76%*

## Source of Water

| Piped Water Supply | Groundwater | Surface Water Body |
|---|---|---|
| ↑ Anjaw 100% | ↑ Lohit 38.5% | ↑ Tirap 4% |
| ↓ Lohit 60.1% | ↓ Dibang Valley, Anjaw 0% | ↓ Anjaw 0% |

*Note - Piped Water connection includes supply of water sourced from groundwater i.e. Well, handpump, tubewell, borewell and spring, and surface water bodies i.e. River, canal, pond and lake.*

## Proximity to the Water Source

| Near Premises | Within Premises | Away |
|---|---|---|
| ↑ Kurung Kumey 63.1% | ↑ Tawang 95.7% | ↑ East Kameng 13.9% |
| ↓ Tawang 4.2% | ↓ Kurung Kumey 29.9% | ↓ Tawang 0.1% |

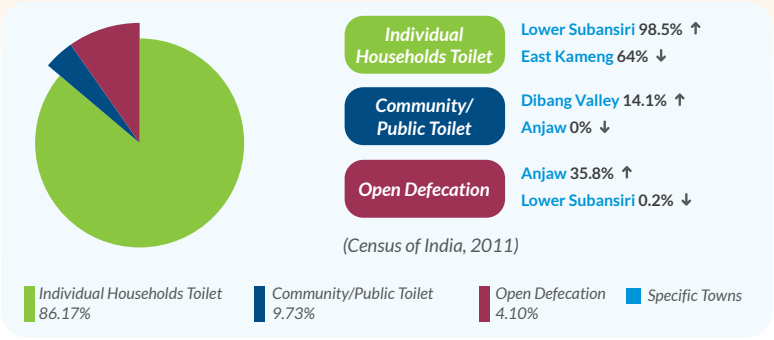
*(Census of India, 2011)*

*Specific Cities*

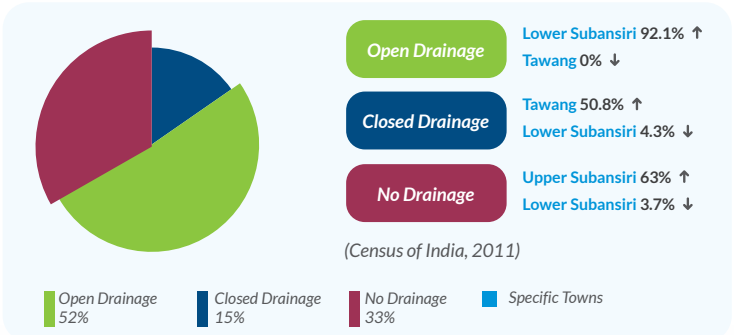
# Access to Sanitation

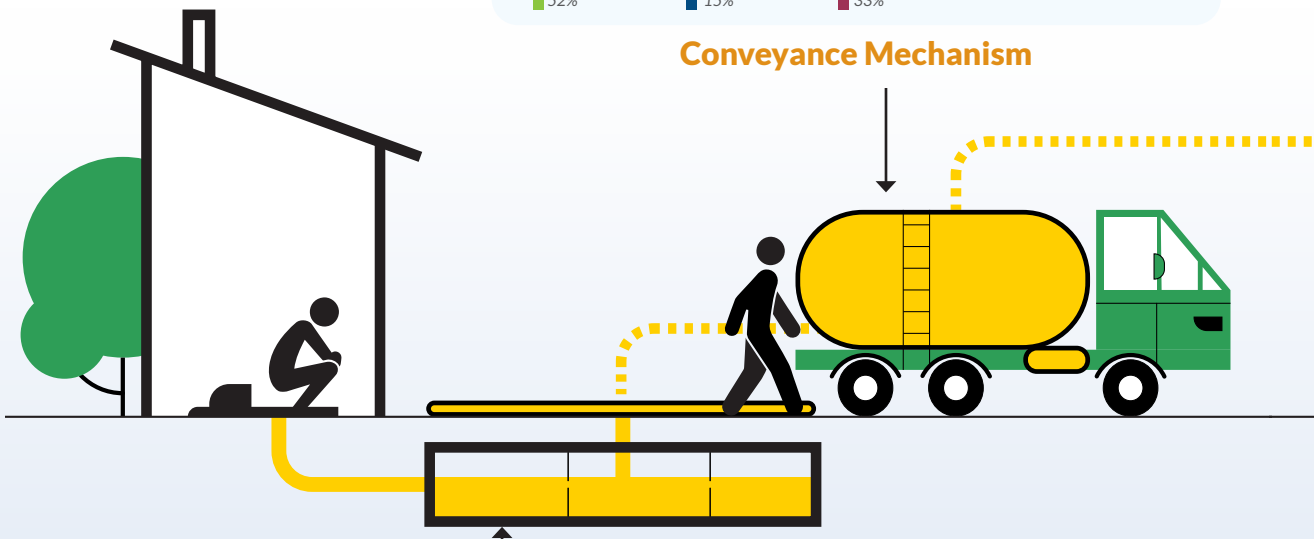
The state has secured 23rd rank in Swachh Survekshan 2021.
Total ULB/Cities – 46 | Individual Household Toilet Target: 12252 | Target Achieved: 79.5%
Community/Public Toilet Target: 387 | Target Achieved: 11.8%
**ODF: 23 ULBs | ODF+: 0 ULBs**

## Access to Toilet

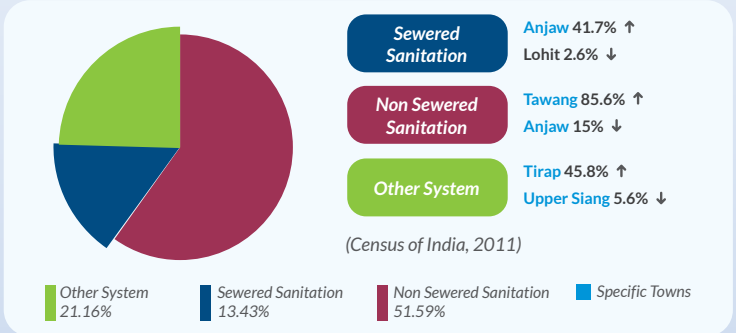


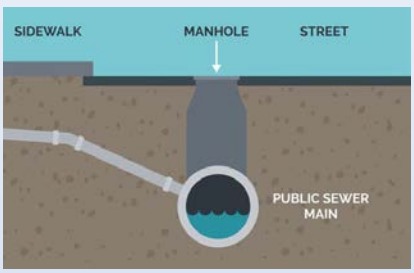

## Conveyance Mechanism



## Containment*




*Note- Drainage refers to type of drainage connectivity for waste water outlet connected to sewered or non-sewered sanitation system. Closed drainage refers to sewered sanitation system. Open drainage refers to non-sewered sanitation and other systems connected to open drains. No drainage refers to having onsite disposal mechanism*

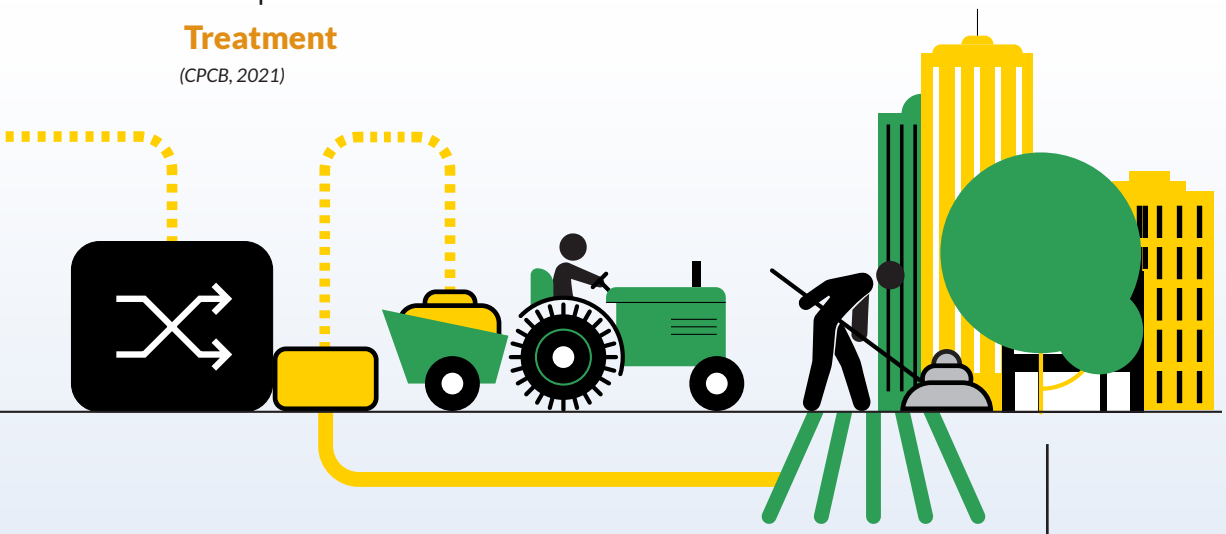
**Attributing percentage of Individual Household Toilet*

*No treatment plant available*

*Total sewage generation*
**62 MLD**

## Treatment

*(CPCB, 2021)*



## Enduse/Disposal

**No Reuse and discharge in open**

## Solid Waste Management

**No Garbage Free City**


*(SBM Urban,2022)*

## School Sanitation

4,047 Institutions

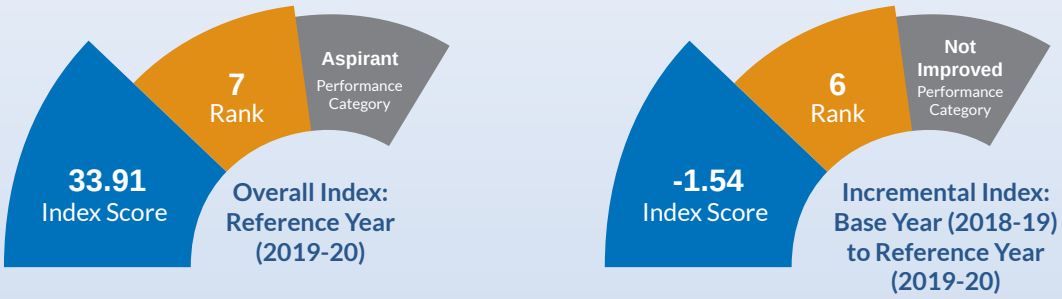
81.47% Drinking Water Facility

96.56% Girls' Toilet

*Source: (National Institute of Educational Planning & Administration, 2018) [8]*

*Note: Institutions include primary, upper primary, secondary and senior secondary schools.*

## Health and Hygiene




*(Ministry of Health and Family Welfare, 2021)[9]*

*Note: Health Index: A weighted composite index based on 24 indicators under the domain of health outcomes, governance and information and key inputs and processes. It is a tool which measures health which changes over time for different geographic areas.*

# Status of National Missions and Programs

| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Itanagar | None |

## SBM Budget Allocation

| Funds Released | SBM 1.0 | Funds Utilised |
|---|---|---|
| 17.07 crores | | 100% |

| Funds Released | SBM 2.0 | Funds Utilised |
|---|---|---|
| NIL | | NIL |

*(Ministry of Housing & Urban Affairs, 2021) [4]*

## Total AMRUT 1.0 Budget: INR 140.25 crore (2015 – 2020)

## Total AMRUT 2.0 Budget: INR 225 crore (2021 – 2026)

| Water Supply | | Sewerage and Septage Management | | Drainage | |
|---|---|---|---|---|---|
| 01 Project | 22.56% Budget | 01 Project | 39.93% Budget | 04 Project | 35.29% Budget |

*(State Annual Action Plan (SAAP), Arunachal Pradesh 2017-20)[5]*

## 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)


*(15th Finance Commission Report for 2021-26)[6]*

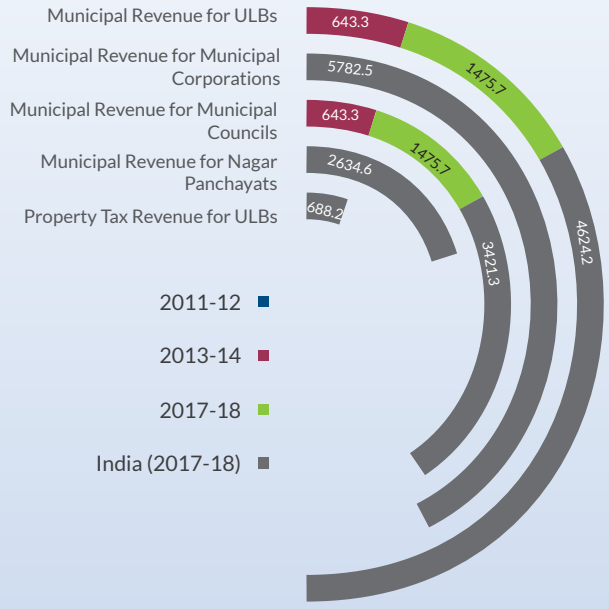
**Grants to local bodies** – Health grants, Rural local bodies, and Urban local bodies.

**Sector specific grants** – Health, PMGSY Roads, Statistics, Judiciary, Higher Education, Agriculture.

**State specific grants** – Social needs, administrative governance and infrastructure, water and sanitation, preservation of culture and historical monuments, high-cost physical infrastructure, and tourism.

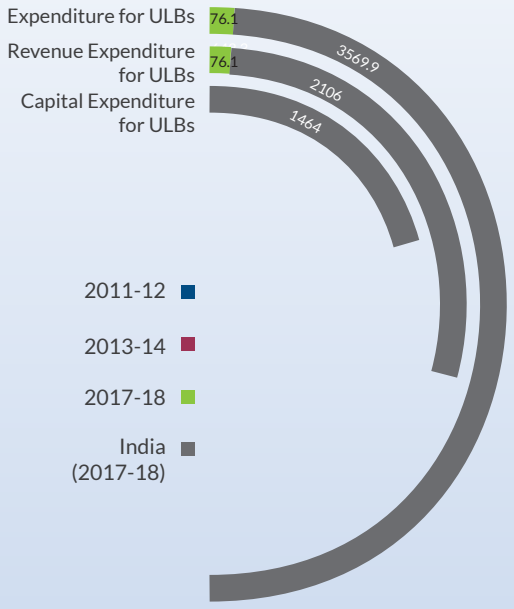
# State Municipal Finances

## Municipal Revenue [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

## Municipal Expenditures [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

# Bibliography


[1] *DES, "Land Use Statistics at a glance 2009-10 to 2018-19," p. 154, 2021, [Online]. Available: https://eands.dacnet.nic.in/LUS_2017-18/Land Use Statistics at a Glance 2008-09 to 2017-18.pdf*

[2] *Government of India, "Population Projections for India and States 2011 - 2036-Report of The Technical Group On Population Projections, July,2020," pp. 26–32, 2020, [Online]. Available: https://main.mohfw.gov.in/sites/default/files/Population Projection Report 2011-2036 - upload_compressed_0.pdf*

[3] *O. Mathur, D. Roy, A. Khare, and S. Mangla, "State of Municipal Finances in India," no. March, 2019.*

[4] *Ministry of Drinking Water & Sanitation, "Swachh Bharat Mission Objectives," no. June, p. 0, 2010, [Online]. Available: http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf*

[5] *AMRUT, "State Annual Action Plan (SAAP) 2017-20," 2020.*

[6] *India, "Report of the 15 th Finance Commission for 2021-26," no. 011, 2021, [Online]. Available: https://prsindia.org/files/policy/policy_committee_reports/Report Summary_15th FC_2021-26.pdf*

[7] *GoI, "SDG India Index & Dashboard 2020-21 report," Partnerships Decad. Action, p. 348, 2021, [Online]. Available: https://niti.gov.in/writereaddata/files/SDG_3.0_Final_04.03.2021_Web_Spreads.pdf*

[8] *Ministry of Human Resource Development, "Educational Statistics at a Glance 2018," Educ. Stat. a Glance, pp. 1–127, 2018, [Online]. Available: https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf*

[9] *NITI Aayog, "Health States Progressive India: Health Index Round IV 2019-20," Minist. Heal. Fam. Welf., no. 4, 2021, [Online]. Available: http://indiabudget.nic.in/ub2013-14/eb/sbe47.pdf*

# Assam

| | |
|---|---|
| Capital | Dispur |
| Districts | 35 |
| Area | 78,438 km$^2$ |
| Total Population (2011) | 31,205,576 |
| Density | 398 persons/km$^2$ |
| Elevation | 198.18 m above MSL |

*Source: Various*


## Geography

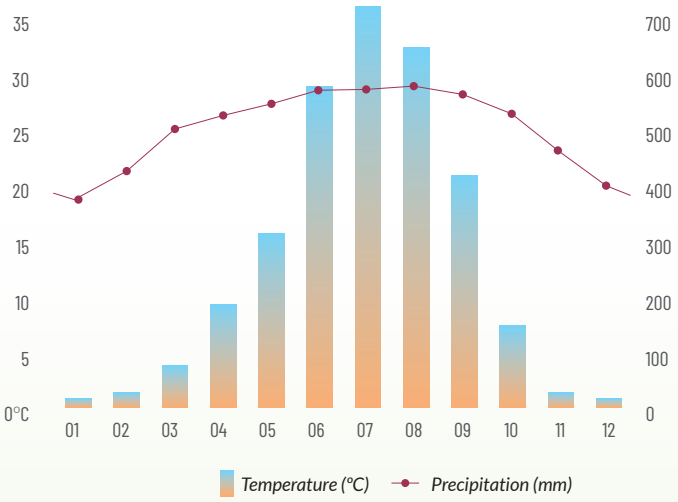
The state is the largest state in the North East bordering seven states and two countries Bangladesh & Bhutan. Assam is surrounded by the Himalayan Mountains, Brahmaputra and Barak River valleys situated at the elevation of 79.5 m above mean sea level.

## Climate

Assam has a humid subtropical, dry winter climate. Assam has a tropical monsoon climate with heavy monsoon. Assam agriculture usually depends on the south-west monsoon rains.

| | |
|---|---|
| Yearly average temperature | 26.14°C |
| Annual precipitation | 145.83 mm |
| Rainy days | 191.64 rainy days |

*Source: Various*

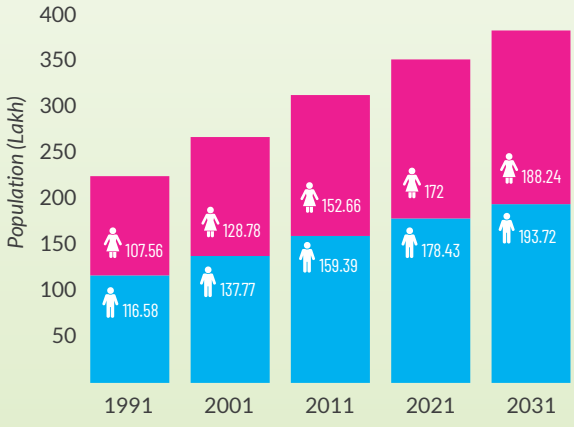



## Demography

As per census 2011, in Assam out of the total population of 31,205,576 persons, 14 % resides in urban and 86 % of the population resides in the rural areas.

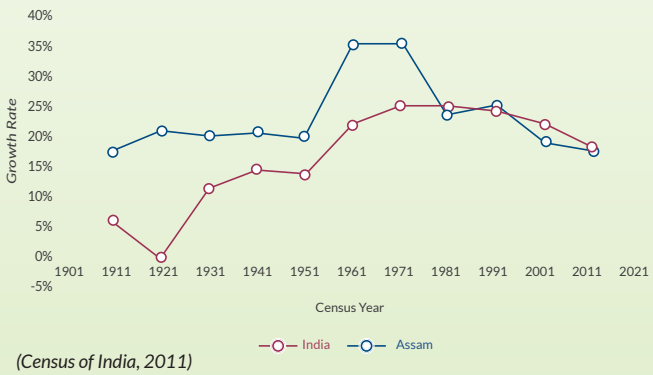
### Sex Ratio


### Population



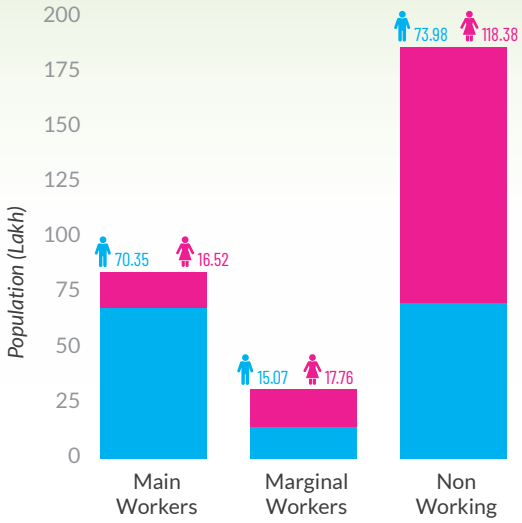

*(Ministry of Health & Family Welfare, 2020)[2]*

### Decadal Variation



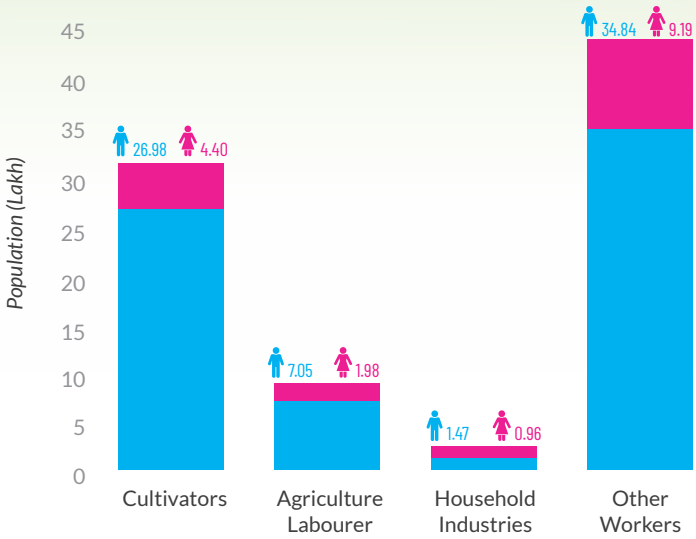

*(Census of India, 2011)*

## Working & Non Working Population




(Census of India, 2011)

## Main Workers

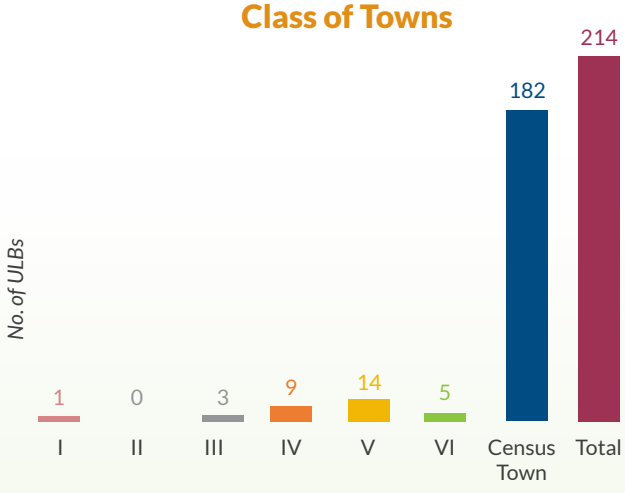



## Family Size

Family size 1 4.53%
Family size 2 8.23%
Family size 3 18.11%
Family size 4 26.57%
Family size 5 18.02%
Family size 6-8 19.60%
Family size 9+ 4.94%

*Population range for each class of city*

## Class of Towns



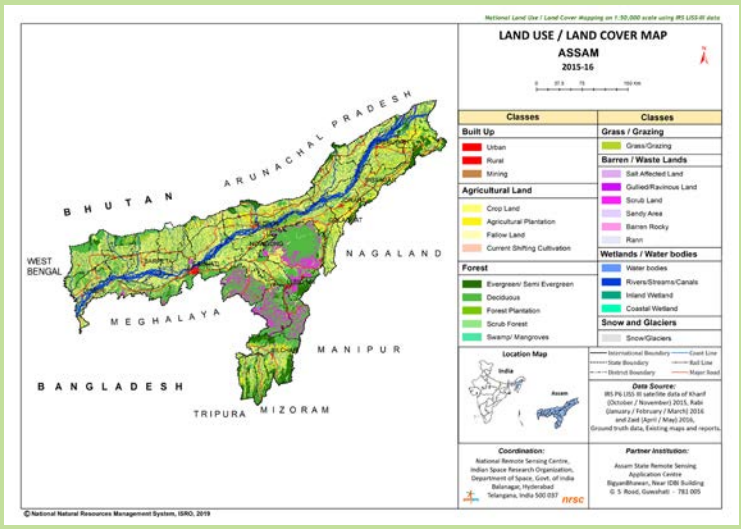

*(Census of India, 2011)*

## Urban Local Body (ULB)

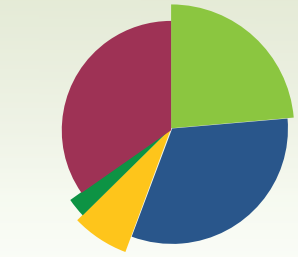
| Municipal Corporations | | | | Municipal Councils | | | | Nagar Panchayats | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Number | 1 | Area (sq.km.) | 216.79 | Number | 31 | Area (sq.km.) | 236.09 | Number | 56 | Area (sq.km.) | 280.93 |
| Population (Lakh) | 9.6 | Population Density (persons/sq/km.) | 4428.2 | Population (Lakh) | 6.8 | Population Density (persons/sq/km.) | 2880.3 | Population (Lakh) | 15.4 | Population Density (persons/sq/km.) | 5481.8 |

*(Indian Council for Research on International Economic Relations, 2019)[3]*

# Land use




*(ISRO,2019)*



24% Forests
32% Not under Cultivable Land
35% Net sown area
7% Uncultivable land excluding Fallow Land
3% Fallow Land

| | |
|---|---|
| Geographical Area (Thousand Hectares) | 7,844 |
| Area for Land Utilisation Statistics (Thousand Hectares) | 7,844 |

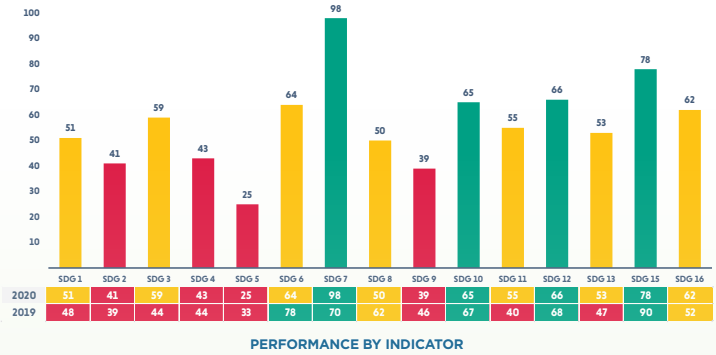
*(Ministry of Agriculture and Farmers Welfare, 2021)[1]*

# SDG Status

The SDG India Index and Dashboard is a crucial tool in India's SDG monitoring efforts. Designed and developed by NITI Aayog, the Index measures the progress at the national and sub-national levels towards meeting the Global Goals and targets


## Performance by Indicator

RANK: 24 RANK: 26 Score: 60 Score: 57



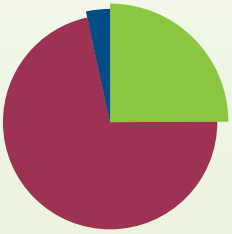

*(NITI Aayog and United Nations, 2021) [7]*

# Access to Water Supply

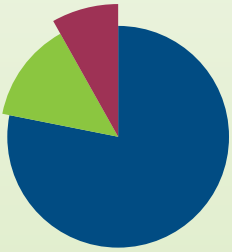
Indicators: ↑Highest ↓Lowest

Nagaon has 65%, Dibrugarh has 65% and Silchar has 70% are three cities under AMRUT having direct water supply.

## State Scenario



Piped Water Supply 25% | Groundwater 72% | Surface Water Body 3%



Near Premises 14% | Within Premises 78% | Away 8%

## Source of Water

| Piped Water Supply | Groundwater | Surface Water Body |
|---|---|---|
| ↑ Cachar 67% | ↑ Baksa 96.5% | ↑ Dhemaji 0.3% |
| ↓ Baksa 2.8% | ↓ Hailakandi 20.8% | ↓ Karimganj 17% |

*Note - Piped Water connection includes supply of water sourced from groundwater i.e. Well, handpump, tubewell, borewell and spring, and surface water bodies i.e. River, canal, pond and lake.*

## Proximity to the Water Source

| Near Premises | Within Premises | Away |
|---|---|---|
| ↑ Barpeta 91.2% | ↑ Dima Hasao 28.8% | ↑ Dima Hasao 29.3% |
| ↓ Dima Hasao 42% | ↓ Barpeta 6.3% | ↓ Dhemaji 1.5% |

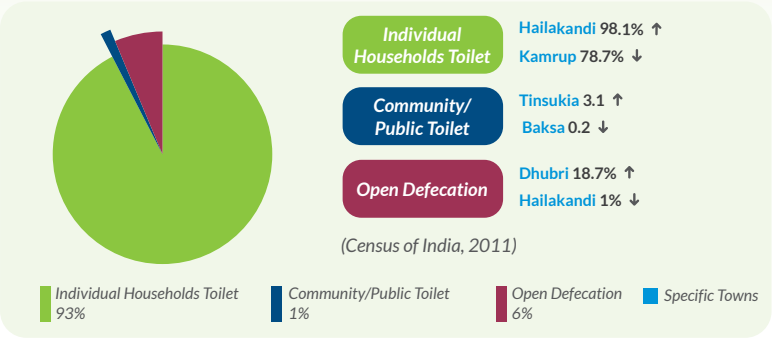
*(Census of India, 2011)*

Specific Cities

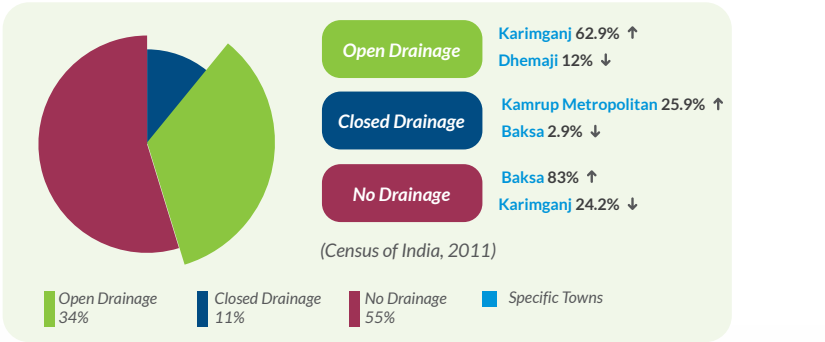
# Access to Sanitation

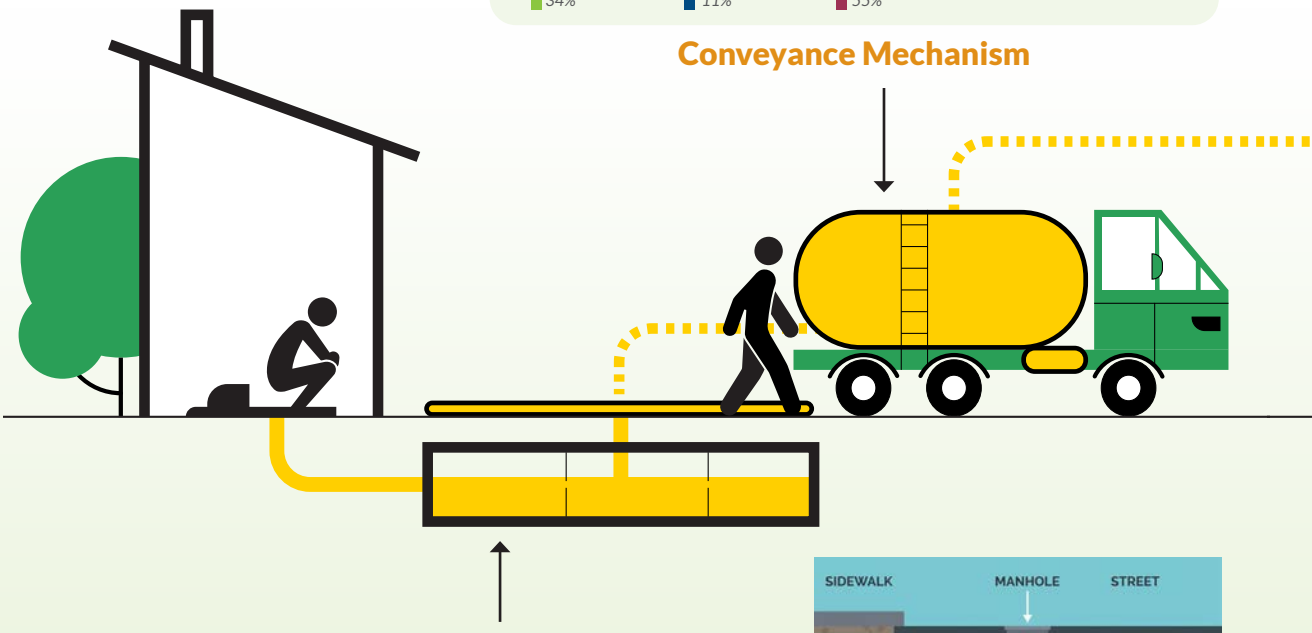
The state has secured 23rd rank in Swachh Survekshan 2021.
Total ULB/Cities – 96 | Individual Household Toilet Target: 75,720 | Target Achieved: 103.19%
Community/Public Toilet Target: 3,554 | Target Achieved: 94.42%
**ODF: 96 ULBs | ODF+: 27 ULBs**

## Access to Toilet

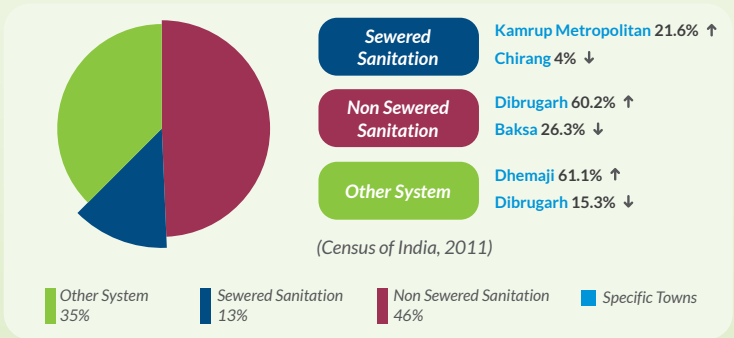



## Conveyance Mechanism

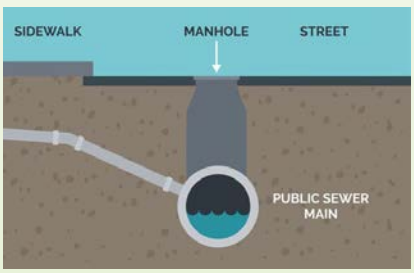


## Containment*




*Attributing percentage of Individual Household Toilet




*Note- Drainage refers to type of drainage connectivity for waste water outlet connected to sewered or non-sewered sanitation system. Closed drainage refers to sewered sanitation system. Open drainage refers to non-sewered sanitation and other systems connected to open drains. No drainage refers to having onsite disposal mechanism*

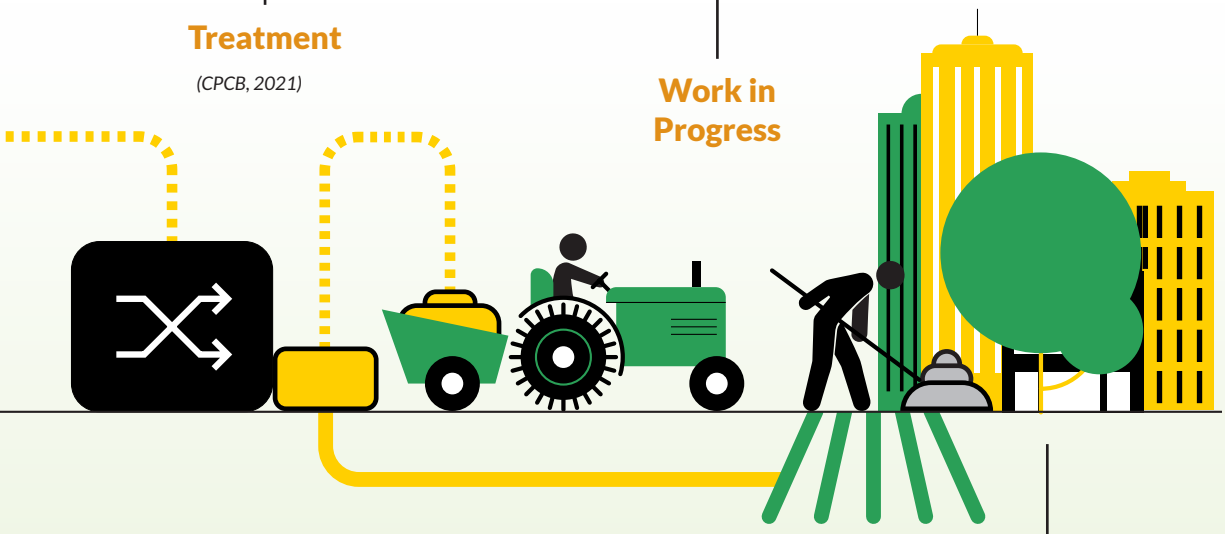
No treatment plant available

Total Sewage generation
809 MLD

Proposed FSTP capacity
120 MLD

Treatment
(CPCB, 2021)

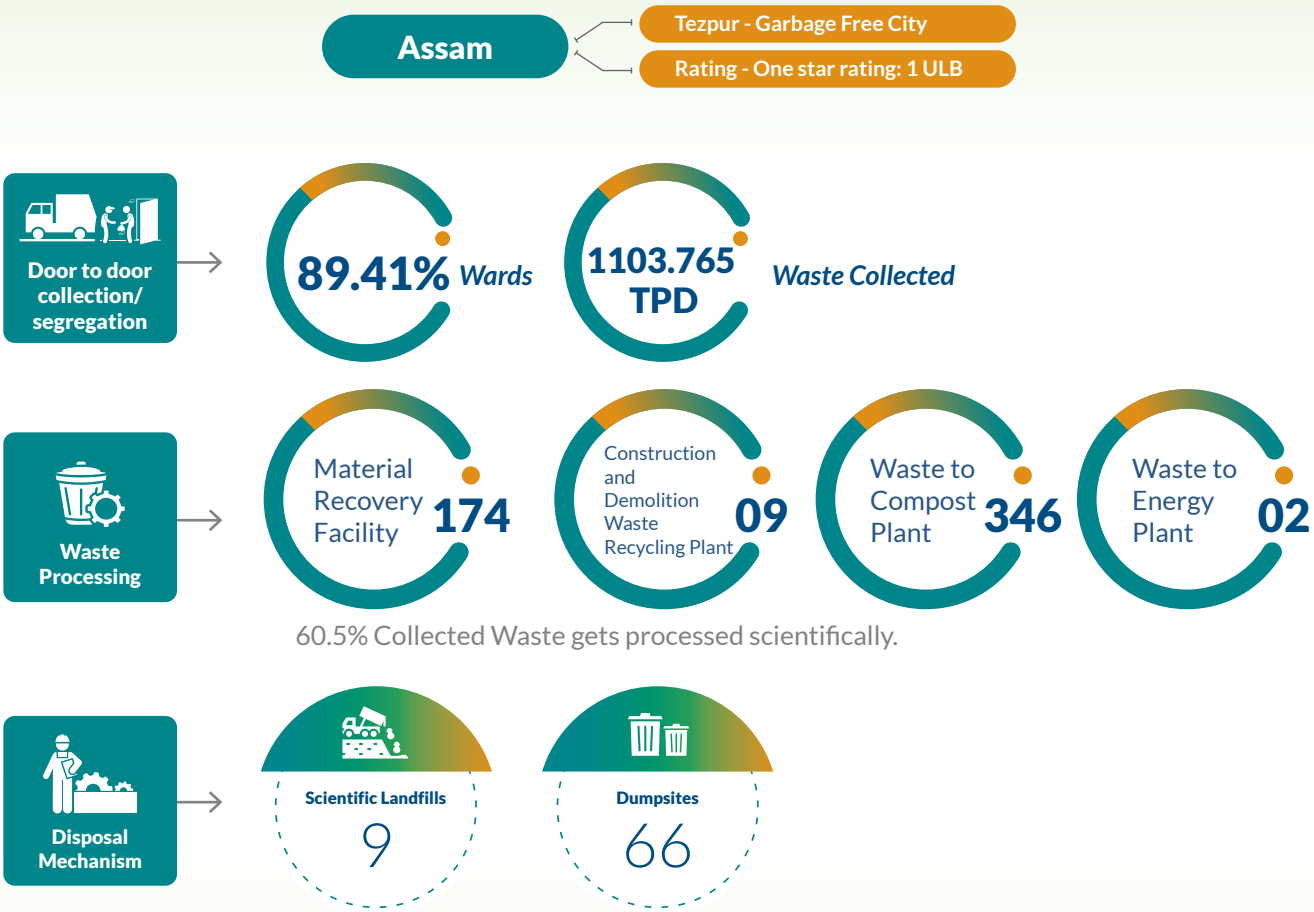
Work in Progress



Enduse/Disposal

No Reuse and discharge in open

## Solid Waste Management




*(SBM Urban, 2022)*

## School Sanitation

71,042 Institutions

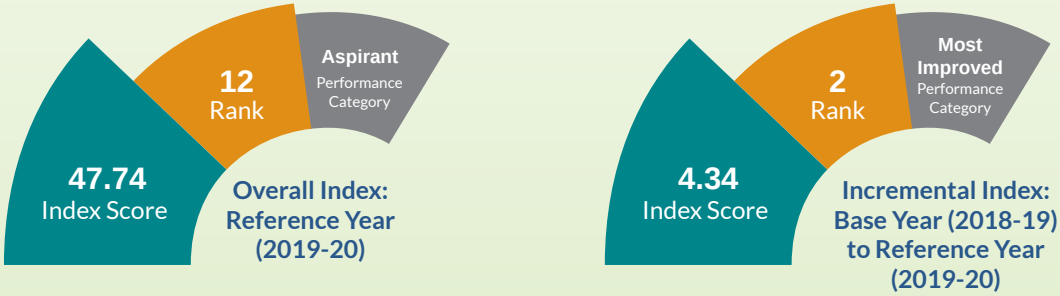
86.21% Drinking Water Facility

83.94% Girls' Toilet

*Source: (National Institute of Educational Planning & Administration, 2018) [8]*

*Note: Institutions include primary, upper primary, secondary and senior secondary schools.*

## Health and Hygiene




*(Ministry of Health and Family Welfare, 2021)[9]*

*Note: Health Index: A weighted composite index based on 24 indicators under the domain of health outcomes, governance and information and key inputs and processes. It is a tool which measures health which changes over time for different geographic areas.*

# Status of National Missions and Programs

| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Guwahati, Nagaon, Dibrugarh, Silchar | Kamrup Metropolitan |

## SBM Budget Allocation

| Funds Released | | Funds Utilised |
|---|---|---|
| 200.58 crores | SBM 1.0 | 73% |
| 3.34 crores | SBM 2.0 | 50% |

*(Ministry of Housing & Urban Affairs, 2021) [4]*

## Total AMRUT 1.0 Budget: INR 657.14 crore (2015 – 2020)

## Total AMRUT 2.0 Budget: INR 770 crore (2021 – 2026)

### Water Supply

03 Projects

85% Budget

### Sewerage and Septage Management

NIL Project

NIL Budget

### Drainage

NIL Project

NIL Budget

*(State Annual Action Plan (SAAP), Assam 2017-20)[5]*

## 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)


*(15th Finance Commission Report for 2021-26)[6]*

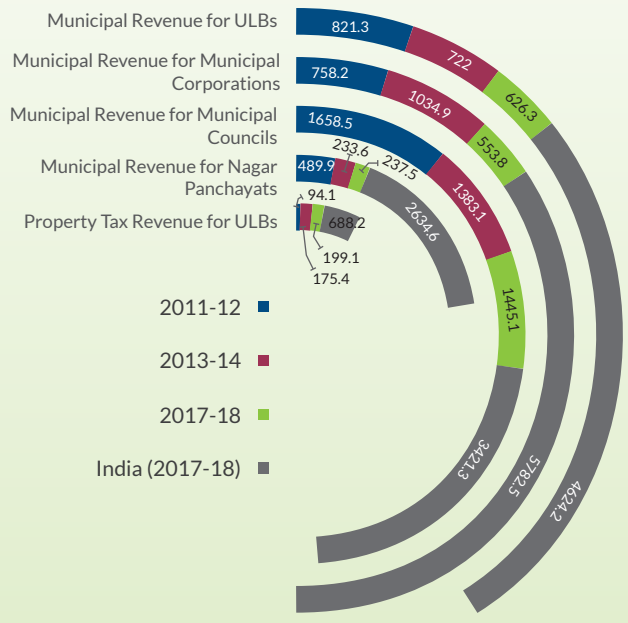
**Grants to local bodies** – Health grants, Rural local bodies, and Urban local bodies.

**Sector specific grants** – Health, PMGSY Roads, Statistics, Judiciary, Higher Education, Agriculture.

**State specific grants** – Social needs, administrative governance and infrastructure, water and sanitation, preservation of culture and historical monuments, high-cost physical infrastructure, and tourism.

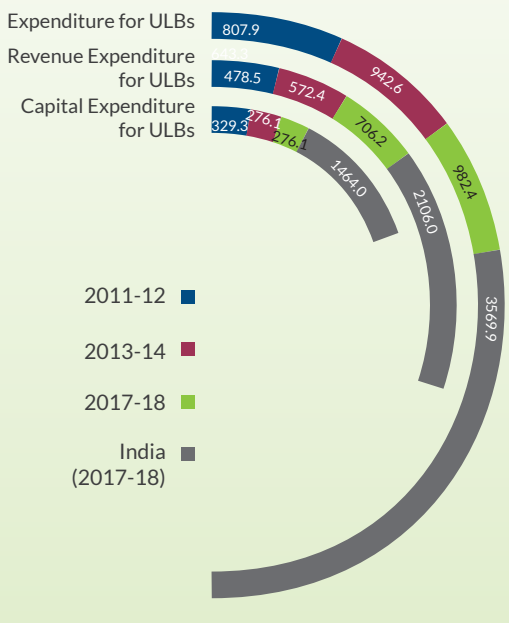
# State Municipal Finances

## Municipal Revenue [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

## Municipal Expenditures [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

# Bibliography


[1] *DES, "Land Use Statistics at a glance 2009-10 to 2018-19," p. 154, 2021, [Online]. Available: https://eands.dacnet.nic.in/LUS_2017-18/Land Use Statistics at a Glance 2008-09 to 2017-18.pdf*

[2] *Government of India, "Population Projections for India and States 2011 - 2036-Report of The Technical Group On Population Projections, July,2020," pp. 26–32, 2020, [Online]. Available: https://main.mohfw.gov.in/sites/default/files/Population Projection Report 2011-2036 - upload_compressed_0.pdf*

[3] *O. Mathur, D. Roy, A. Khare, and S. Mangla, "State of Municipal Finances in India," no. March, 2019.*

[4] *Ministry of Drinking Water & Sanitation, "Swachh Bharat Mission Objectives," no. June, p. 0, 2010, [Online]. Available: http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf*

[5] *AMRUT, "State Annual Action Plan (SAAP) 2017-20," 2017.*

[6] *India, "Report of the 15 th Finance Commission for 2021-26," no. 011, 2021, [Online]. Available: https://prsindia.org/files/policy/policy_committee_reports/Report Summary_15th FC_2021-26.pdf*

[7] *GoI, "SDG India Index & Dashboard 2020-21 report," Partnerships Decad. Action, p. 348, 2021, [Online]. Available: https://niti.gov.in/writereaddata/files/SDG_3.0_Final_04.03.2021_Web_Spreads.pdf*

[8] *Ministry of Human Resource Development, "Educational Statistics at a Glance 2018," Educ. Stat. a Glance, pp. 1–127, 2018, [Online]. Available: https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf*

[9] *NITI Aayog, "Health States Progressive India: Health Index Round IV 2019-20," Minist. Heal. Fam. Welf., no. 4, 2021, [Online]. Available: http://indiabudget.nic.in/ub2013-14/eb/sbe47.pdf*

# Himachal Pradesh

| | |
|---|---|
| Capital | Shimla (Summer) |
| | Dharamshala (Winter) |
| Districts | 12 |
| Area | 55,673 km$^2$ |
| Total Population (2011) | 68,64,602 |
| Density | 123 persons/km$^2$ |
| Elevation | 2197.07 m above MSL |

*Source: Various*


## Geography

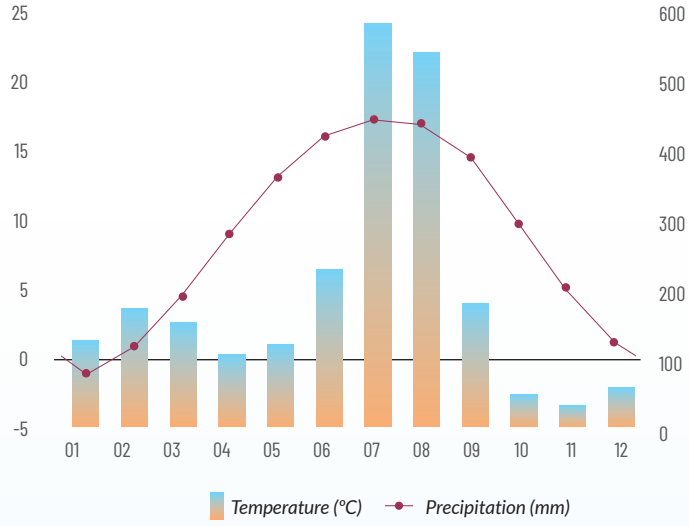
The state is bordered by Jammu & Kashmir on the North, Punjab on the West and South – West, Haryana on the South, Uttarakhand state border on the South-East and China on the East. The State is spread across valleys with many rivers flowing. The state elevation varies from 350m to 6,975m.

## Climate

The state has huge variation in the climatic condition due to variation in altitude. The state has a subtropical climate with an average annual rainfall of 1,251 mm. Dharamshala receives the highest rainfall nearly about 3,400mm.

| | |
|---|---|
| Yearly average temperature | 18.4°C |
| Annual precipitation | 105.62 mm |
| Rainy days | 146.27 rainy days |

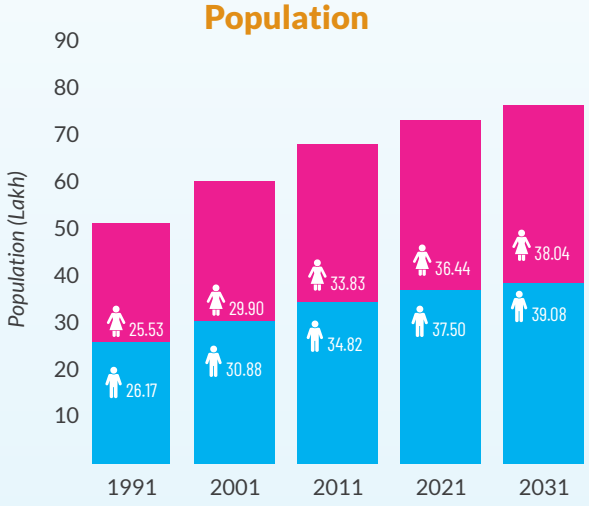
*Source: Various*




## Demography

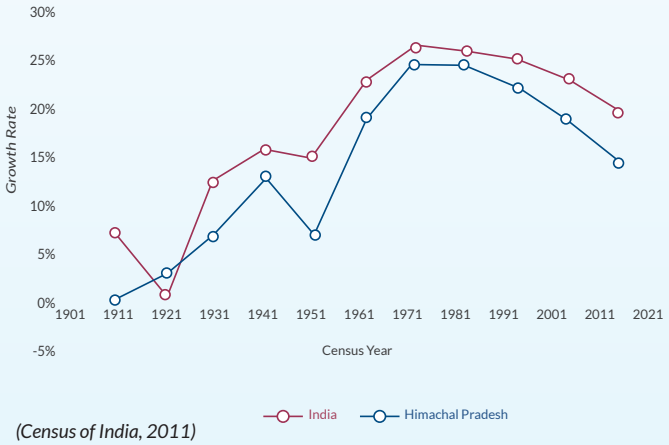
As per census 2011 and state annual action plan for AMRUT, 10 % of the total population resides in urban areas and 90 % resides in rural areas.


### Population



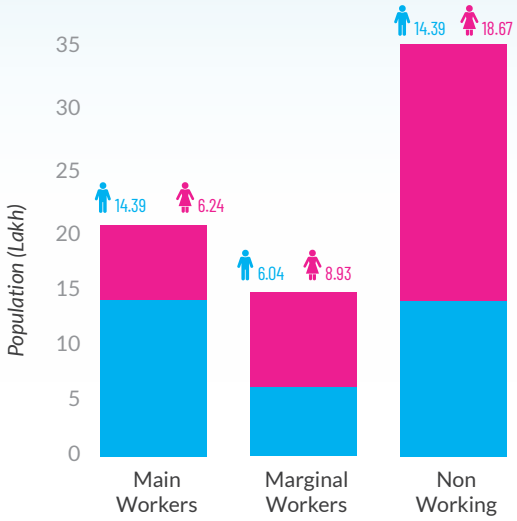

*(Ministry of Health & Family Welfare, 2020)[2]*

### Decadal Variation



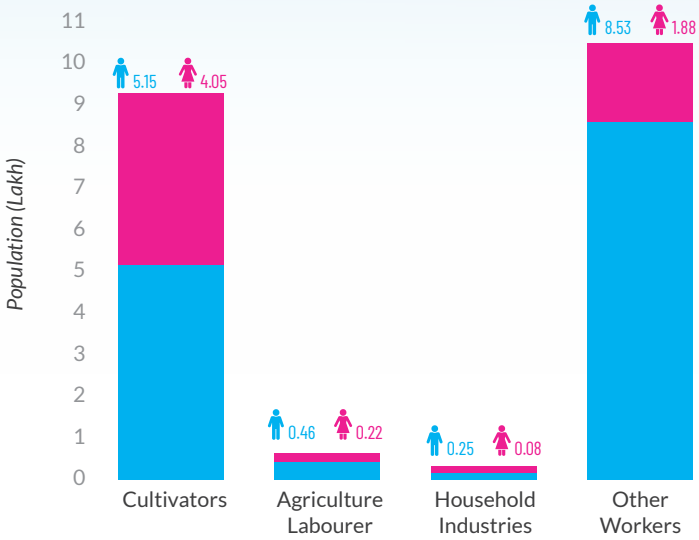

*(Census of India, 2011)*

## Working & Non Working Population

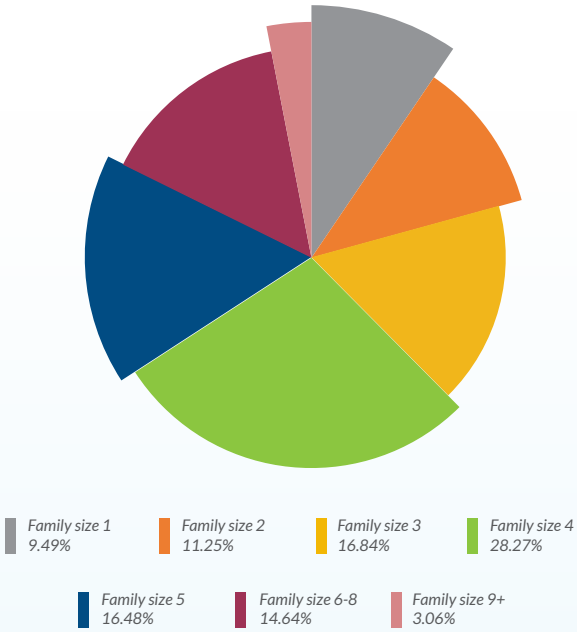



(Census of India, 2011)

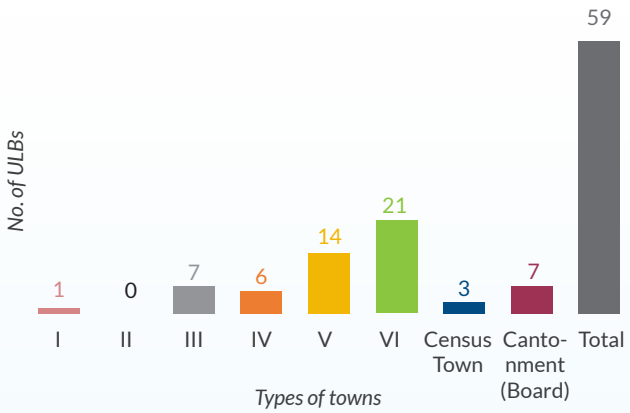
## Main Workers




## Family Size




## Class of Towns




(Census of India, 2011)

## Urban Local Body (ULB)

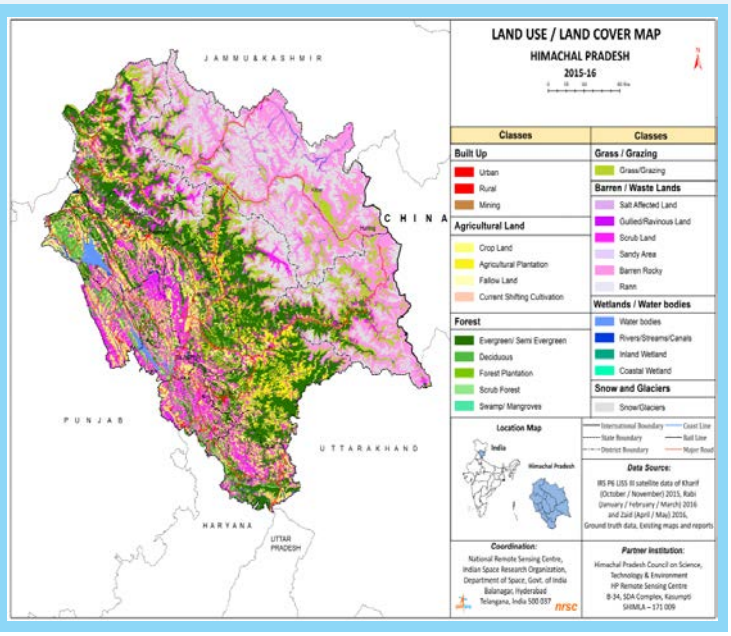
| Municipal Corporations | | | |
|---|---|---|---|
| Number | 2 | Area (sq.km.) | 42.93 |
| Population (Lakh) | 2.2 | Population Density (persons/sq/km.) | 5124.6 |

| Municipal Councils | | | |
|---|---|---|---|
| Number | 31 | Area (sq.km.) | 168.6 |
| Population (Lakh) | 4.1 | Population Density (persons/sq/km.) | 2431.8 |

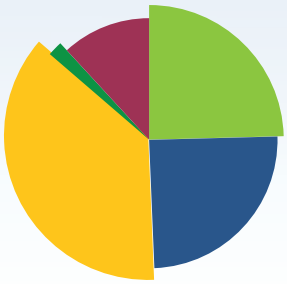
| Nagar Panchayats | | | |
|---|---|---|---|
| Number | 21 | Area (sq.km.) | 68.35 |
| Population (Lakh) | 0.8 | Population Density (persons/sq/km.) | 1170.4 |

*(Indian Council for Research on International Economic Relations, 2019)[3]*

# Land use




*(ISRO, 2019)*



25% Forests

25% Not under Cultivable Land

12% Net sown area

37% Uncultivable land excluding Fallow Land

2% Fallow land

| | |
|---|---|
| Geographical Area (Thousand Hectares) | 5,567 |
| Area for Land Utilisation Statistics (Thousand Hectares) | 4,577 |

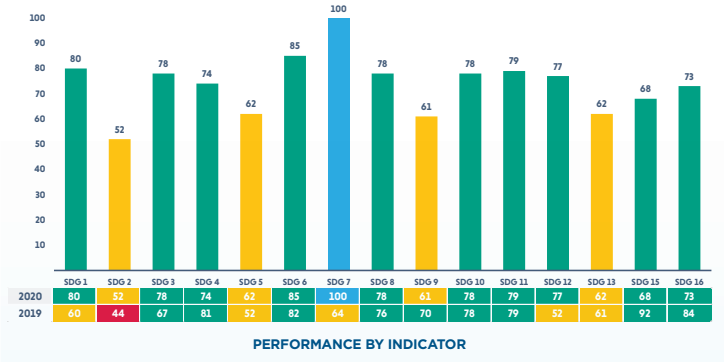
*(Ministry of Agriculture and Farmers Welfare, 2021)[1]*

# SDG Status

The SDG India Index and Dashboard is a crucial tool in India's SDG monitoring efforts. Designed and developed by NITI Aayog, the Index measures the progress at the national and sub-national levels towards meeting the Global Goals and targets


## Performance by Indicator

RANK: 3 Score: 74



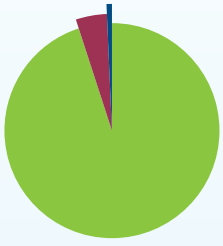

*(NITI Aayog and United Nations, 2021) [7]*

# Access to Water Supply

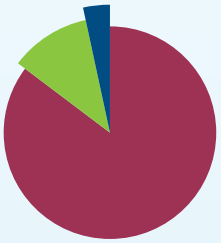
Indicators: ↑Highest ↓Lowest

Shimla with 70% and Kullu with 77% have piped water supply, with a target of achieving 100% by end of AMRUT mission.

## State Scenario



Piped Water Supply 95% | Groundwater 4% | Surface Water Body 1%



Near Premises 11% | Within Premises 85% | Away 4%

## Source of Water

| Piped Water Supply | Groundwater | Surface Water Body |
|---|---|---|
| ↑ Mandi 98.4% | ↑ Una 12.7% | ↑ Shimla 1.5% |
| ↓ Una 86.8% | ↓ Mandi 1% | ↓ Bilaspur, Kangra, Solan 0.3% |

*Note - Piped Water connection includes supply of water sourced from groundwater i.e. Well, handpump, tubewell, borewell and spring, and surface water bodies i.e. River, canal, pond and lake.*

## Proximity to the Water Source

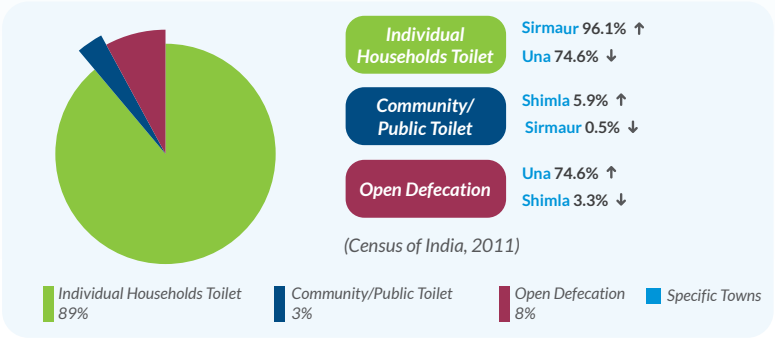
| Near Premises | Within Premises | Away |
|---|---|---|
| ↑ Mandi 90.6% | ↑ Una 14.7% | ↑ Kangra 5.5% |
| ↓ Una 80.6% | ↓ Sirmaur 7.4% | ↓ Mandi 1.3% |

*(Census of India, 2011)*

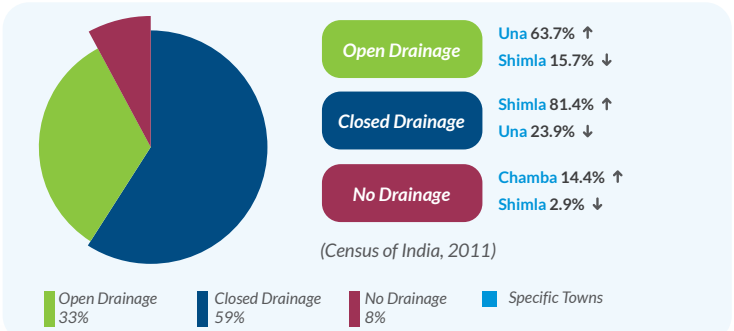
Specific Cities

# Access to Sanitation

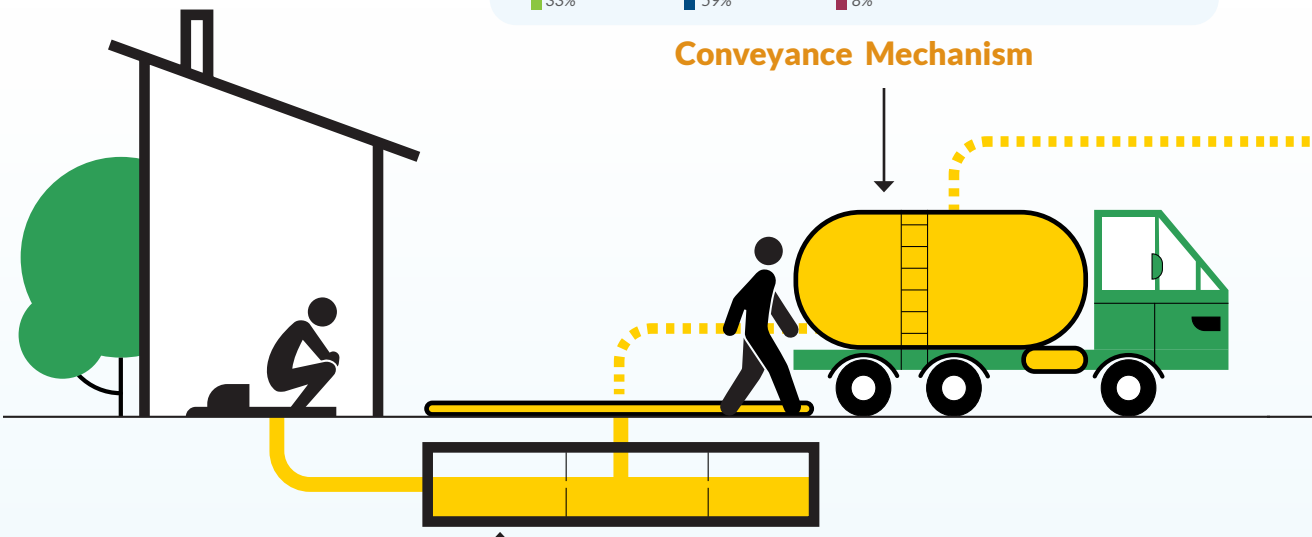
The state has secured 17th rank in Swachh Survekshan 2021.
Total ULB/Cities – 68 | Individual Household Toilet Target: 11,266 | Target Achieved: 59.85%
Community/Public Toilet Target: 876 | Target Achieved: 194.06%
**ODF: 61 ULBs | ODF+: 26 ULBs | ODF++: 2 ULBs**



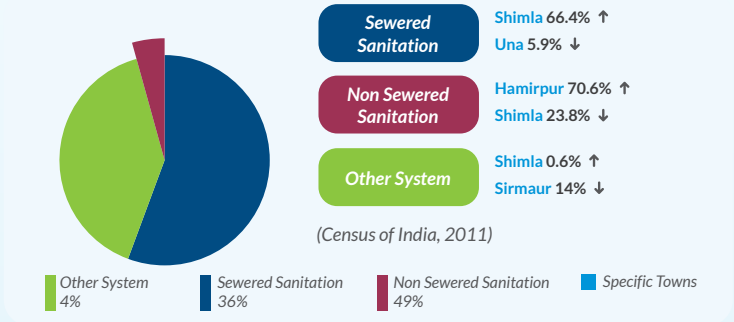

## Access to Toilet

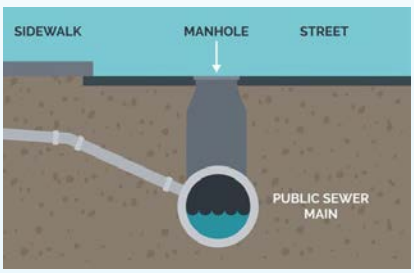



## Conveyance Mechanism



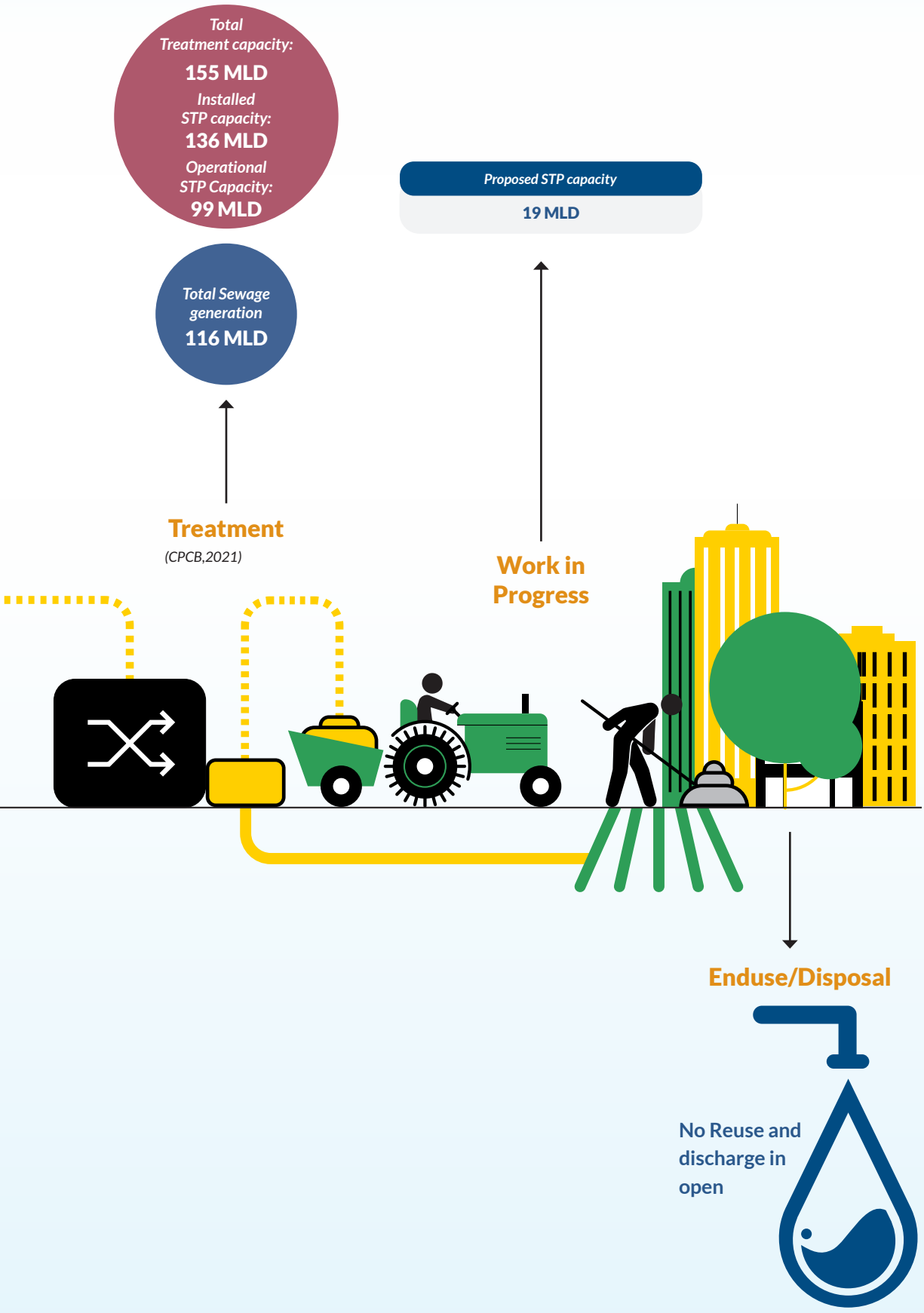
## Containment*



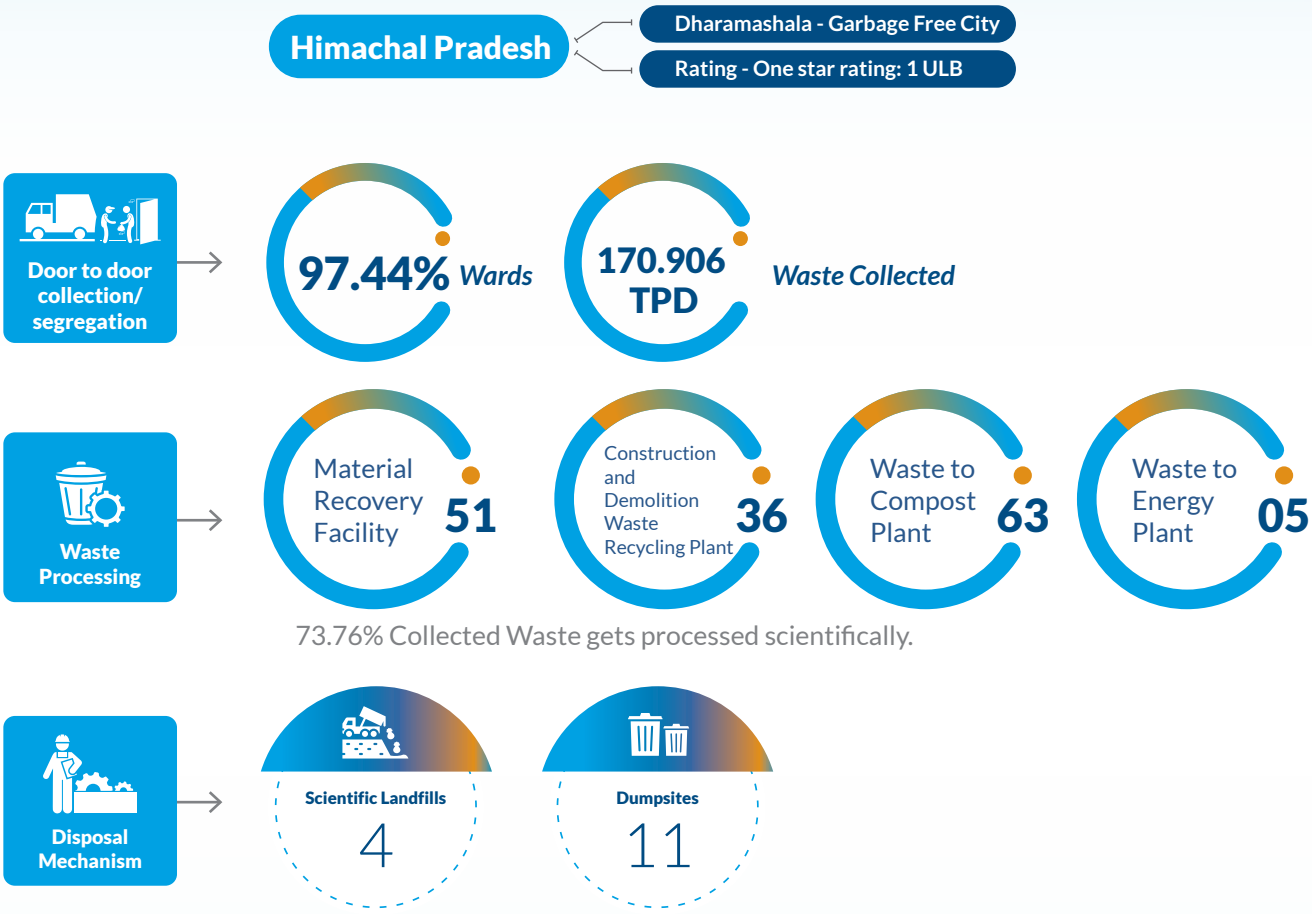




*Note- Drainage refers to type of drainage connectivity for waste water outlet connected to sewered or non-sewered sanitation system. Closed drainage refers to sewered sanitation system. Open drainage refers to non-sewered sanitation and other systems connected to open drains. No drainage refers to having onsite disposal mechanism*

**Attributing percentage of Individual Household Toilet*


Total
Treatment capacity:
155 MLD
Installed
STP capacity:
136 MLD
Operational
STP Capacity:
99 MLD
Proposed STP capacity
19 MLD
Total Sewage
generation
116 MLD
Treatment
(CPCB,2021)
Work in
Progress
Enduse/Disposal
No Reuse and
discharge in
open

## Solid Waste Management




*(SBM Urban,2022)*

## School Sanitation

18,039 Institutions

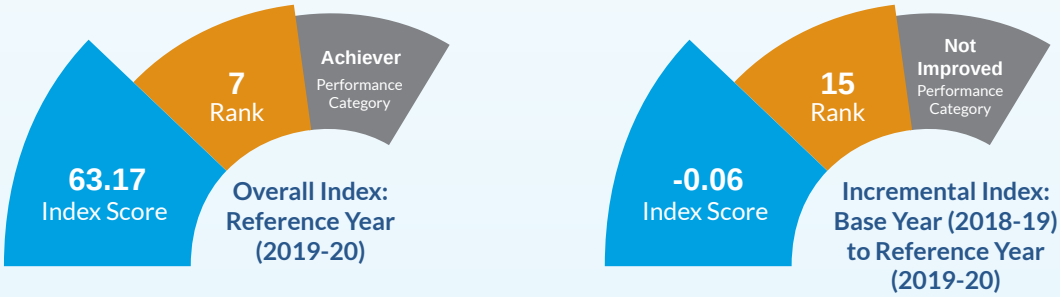
99.86% Drinking Water Facility

99.82% Girls' Toilet

*Source: (National Institute of Educational Planning & Administration, 2018) [8]*

*Note: Institutions include primary, upper primary, secondary and senior secondary schools.*

## Health and Hygiene




*(Ministry of Health and Family Welfare, 2021)[9]*

*Note: Health Index: A weighted composite index based on 24 indicators under the domain of health outcomes, governance and information and key inputs and processes. It is a tool which measures health which changes over time for different geographic areas.*

# Status of National Missions and Programs

| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Shimla, Kullu | Dharamshala |

## SBM Budget Allocation

| Funds Released | | Funds Utilised |
|---|---|---|
| 24.68 crores | SBM 1.0 | 69% |

| Funds Released | | Funds Utilised |
|---|---|---|
| NIL | SBM 2.0 | NIL |

*(Ministry of Housing & Urban Affairs, 2021) [4]*

## Total AMRUT 1.0 Budget: INR 304.52 crore (2015 – 2020)

## Total AMRUT 2.0 Budget: INR 252 crore (2021 – 2026)

### Water Supply

01 Project

32% Budget

### Sewerage and Septage Management

01 Project

28% Budget

### Drainage

01 Project

12% Budget

*(State Annual Action Plan (SAAP), Himachal Pradesh 2017-20)[5]*

## 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)


*(15th Finance Commission Report for 2021-26)[6]*

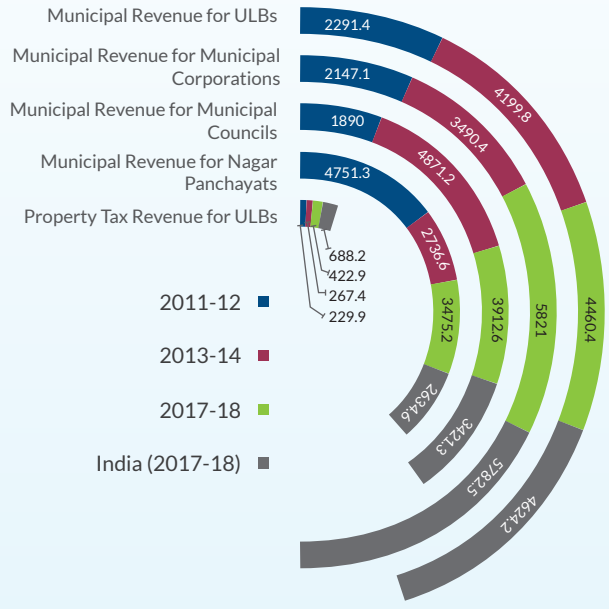
**Grants to local bodies** – Health grants, Rural local bodies, and Urban local bodies.

**Sector specific grants** – Health, PMGSY Roads, Statistics, Judiciary, Higher Education, Agriculture.

**State specific grants** – Social needs, administrative governance and infrastructure, water and sanitation, preservation of culture and historical monuments, high-cost physical infrastructure, and tourism.

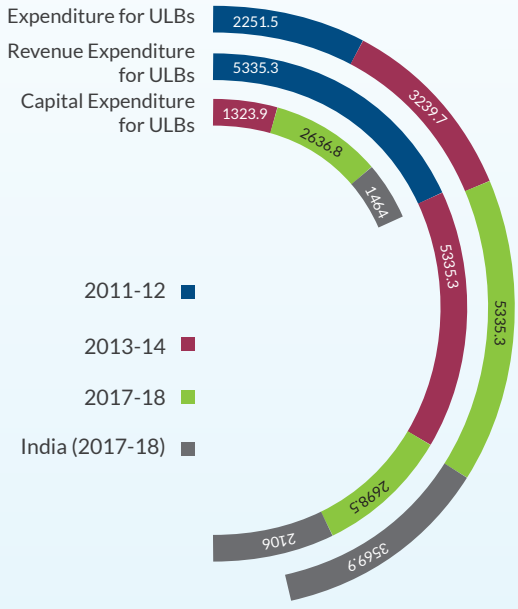
# State Municipal Finances

## Municipal Revenue [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

## Municipal Expenditures [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

# Bibliography


[1] *DES, "Land Use Statistics at a glance 2009-10 to 2018-19," p. 154, 2021, [Online]. Available: https://eands.dacnet.nic.in/LUS_2017-18/Land Use Statistics at a Glance 2008-09 to 2017-18.pdf*

[2] *Government of India, "Population Projections for India and States 2011 - 2036-Report of The Technical Group On Population Projections, July,2020," pp. 26–32, 2020, [Online]. Available: https://main.mohfw.gov.in/sites/default/files/Population Projection Report 2011-2036 - upload_compressed_0.pdf*

[3] *O. Mathur, D. Roy, A. Khare, and S. Mangla, "State of Municipal Finances in India," no. March, 2019.*

[4] *Ministry of Drinking Water & Sanitation, "Swachh Bharat Mission Objectives," no. June, p. 0, 2010, [Online]. Available: http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf*

[5] *AMRUT, "State Annual Action Plan (SAAP) 2017-20," 2017.*

[6] *India, "Report of the 15 th Finance Commission for 2021-26," no. 011, 2021, [Online]. Available: https://prsindia.org/files/policy/policy_committee_reports/Report Summary_15th FC_2021-26.pdf*

[7] *GoI, "SDG India Index & Dashboard 2020-21 report," Partnerships Decad. Action, p. 348, 2021, [Online]. Available: https://niti.gov.in/writereaddata/files/SDG_3.0_Final_04.03.2021_Web_Spreads.pdf*

[8] *Ministry of Human Resource Development, "Educational Statistics at a Glance 2018," Educ. Stat. a Glance, pp. 1–127, 2018, [Online]. Available: https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf*

[9] *NITI Aayog, "Health States Progressive India: Health Index Round IV 2019-20," Minist. Heal. Fam. Welf., no. 4, 2021, [Online]. Available: http://indiabudget.nic.in/ub2013-14/eb/sbe47.pdf*

# Jammu & Kashmir

| | |
|---|---|
| Capital | Srinagar (Summer) |
| | Jammu (Winter) |
| Districts | 20 |
| Area | 42,241 km$^2$ |
| Total Population (2011) | 1,25,41,302 |
| Density | 290 persons/km$^2$ |
| Elevation | 2717.33 m above MSL |

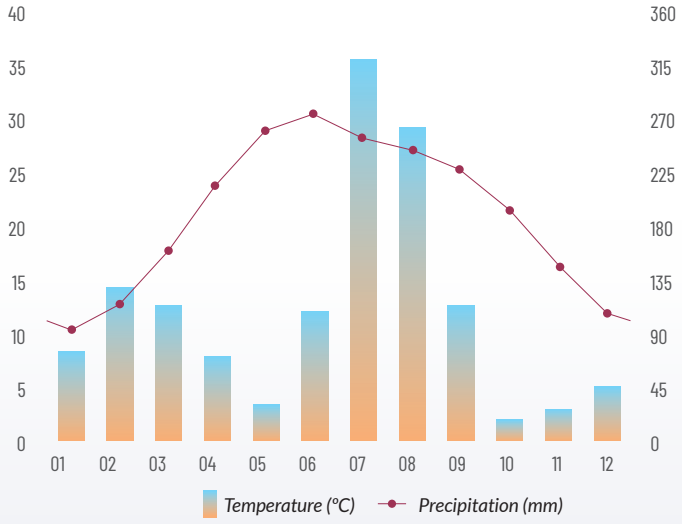
*Source: Various*


## Geography

Jammu and Kashmir has a geographic area of 1,01,387 Sq. Kms. It lies between latitude from 32°17' N and 37°05' N and longitude 72°31' E and 80°20' E. It is divided into two geographic regions viz. Kashmir Valley and Jammu. The higher regions are covered by PirPanjal, Karakoram and inner Himalayan ranges of mountains. The important river systems of the UT are the Chenab, the Tawi and the Jhelum.

## Climate

Jammu and Kashmir has a humid subtropical, dry winter climate. When compared with winter, the summers have much more rainfall. The climate of Jammu and Kashmir varies with altitude and across regions.




| | |
|---|---|
| Yearly average temperature | 25.88°C |
| Annual precipitation | 40.73 mm |
| Rainy days | 72.53 rainy days |

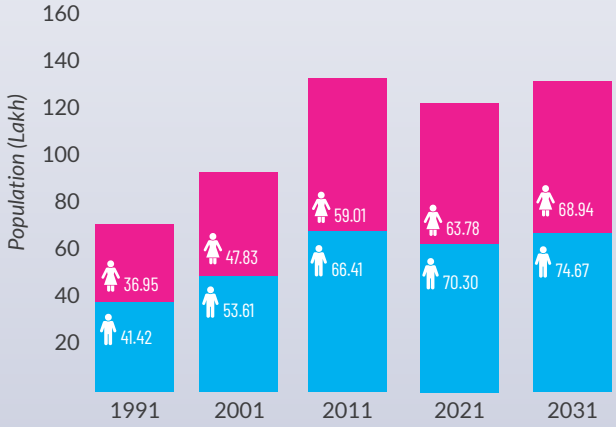
*Source: Various*

## Demography

As per census 2011, 27.38 % of the total population resides in urban areas and 72.62% resides in rural areas.

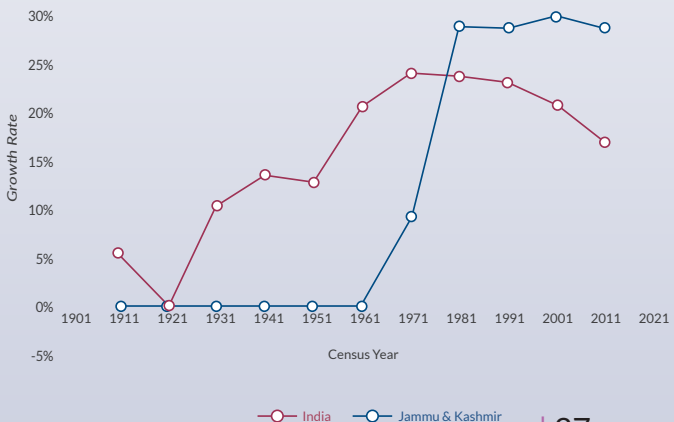
### Sex Ratio


### Population



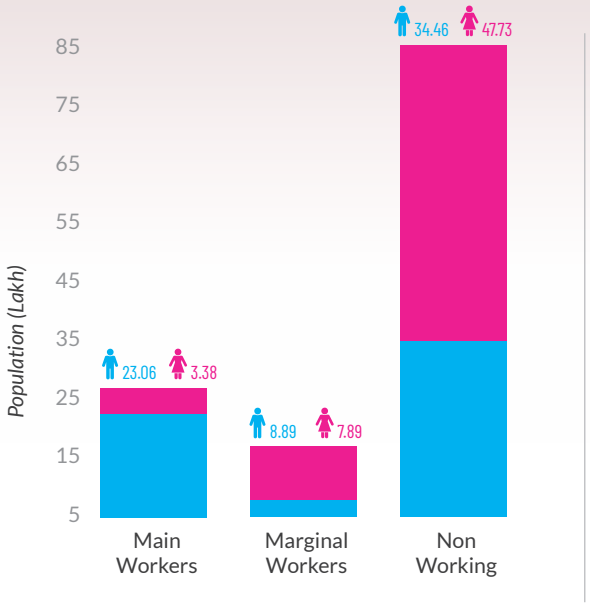

*(Ministry of Health & Family Welfare, 2020)[2]*

### Decadal Variation



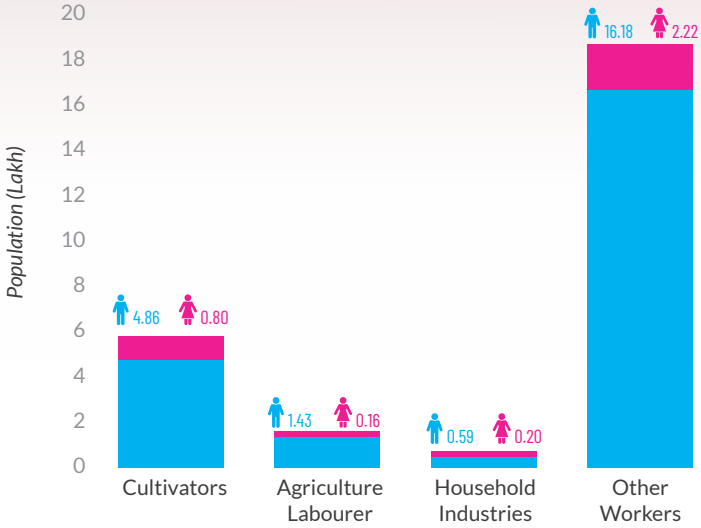

*(Census of India, 2011)*

## Working & Non Working Population

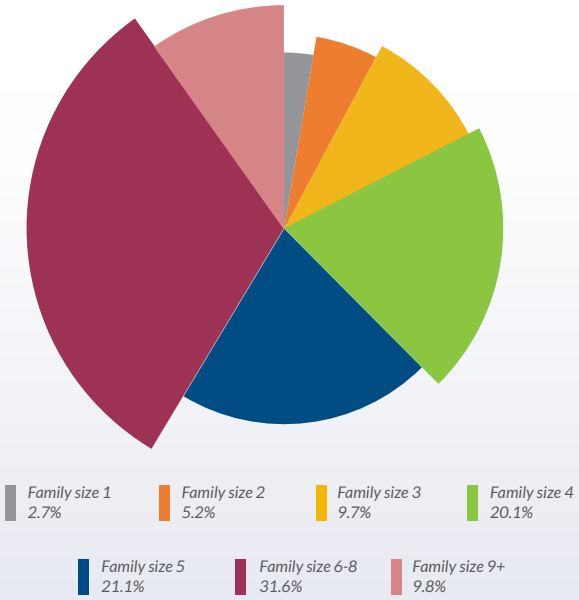



(Census of India, 2011)

## Main Workers

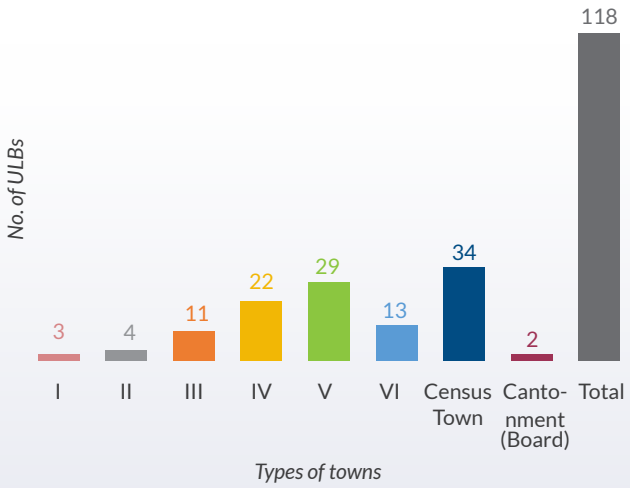



## Family Size




*Population range for each class of city*

## Class of Towns




*(Census of India, 2011)*

## Urban Local Body (ULB)

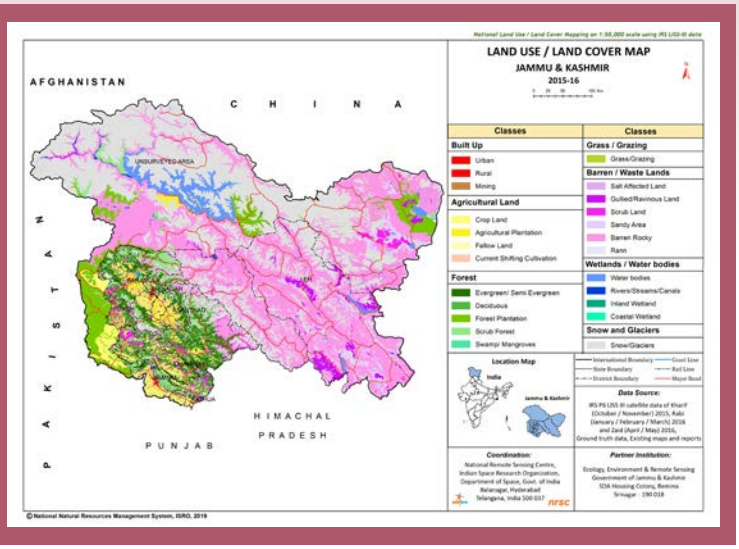
| Municipal Corporations | | | |
|---|---|---|---|
| Number | 2 | Area (sq.km.) | 437 |
| Population (Lakh) | 17.8 | Population Density (persons/sq/km.) | 4073.2 |

| Municipal Councils | | | |
|---|---|---|---|
| Number | 76 | Area (sq.km.) | 453.7 |
| Population (Lakh) | 13.3 | Population Density (persons/sq/km.) | 2931.5 |

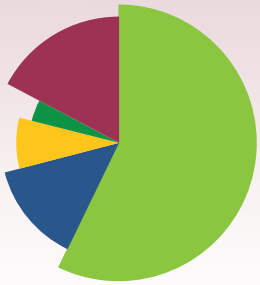
| Nagar Panchayats | | | |
|---|---|---|---|
| Number | 0 | Area (sq.km.) | 0 |
| Population (Lakh) | 0 | Population Density (persons/sq/km.) | 0 |

*(Indian Council for Research on International Economic Relations, 2019)[3]*

# Land use




*(ISRO, 2019)*



57% Forests

14% Not under Cultivable Land

17% Net sown area

8% Uncultivable land excluding Fallow Land

4% Total Fallow Lands

| | |
|---|---|
| Geographical Area (Thousand Hectares) | 22,224 |
| Area for Land Utilisation Statistics (Thousand Hectares) | 4,130 |

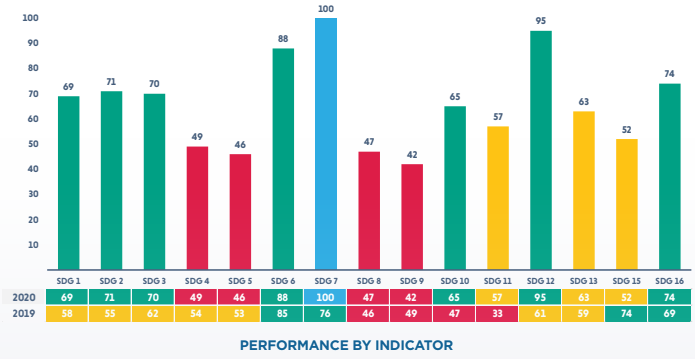
*(Ministry of Agriculture and Farmers Welfare, 2021)[1]*

# SDG Status

The SDG India Index and Dashboard is a crucial tool in India's SDG monitoring efforts. Designed and developed by NITI Aayog, the Index measures the progress at the national and sub-national levels towards meeting the Global Goals and targets


## Performance by Indicator

RANK: 6 Score: 66



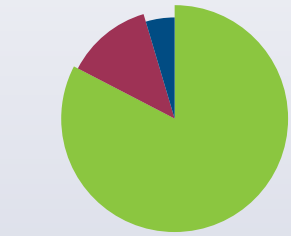

*(NITI Aayog and United Nations, 2021) [7]*

# Access to Water Supply

Indicators: ↑Highest ↓Lowest

As per State Annual Action Plan (SAAP) 2017-2020, Srinagar has 97%, Jammu has 100%, Anantnag has 90% and Leh has 43% household with water supply according to baseline survey. It is targeted to provide water supply to 100% HHs in all the cities by the end of AMRUT Program.

## State Scenario

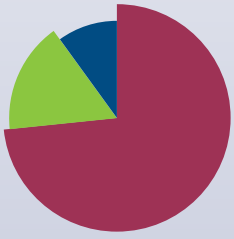


*Piped Water Supply 83%* *Groundwater 13%* *Surface Water Body 4%*

## Source of Water

| Piped Water Supply | Groundwater | Surface Water Body |
|---|---|---|
| ↑ Shupiyan 99.9% | ↑ Kargil 39.4% | ↑ NA |
| ↓ Kargil 47.4% | ↓ Shupiyan 0.1% | ↓ Shupiyan 0% |

*Note - Piped Water connection includes supply of water sourced from groundwater i.e. Well, handpump, tubewell, borewell and spring, and surface water bodies i.e. River, canal, pond and lake.*



*Near Premises 16.65%* *Within Premises 73.36%* *Away 9.99%*

## Proximity to the Water Source

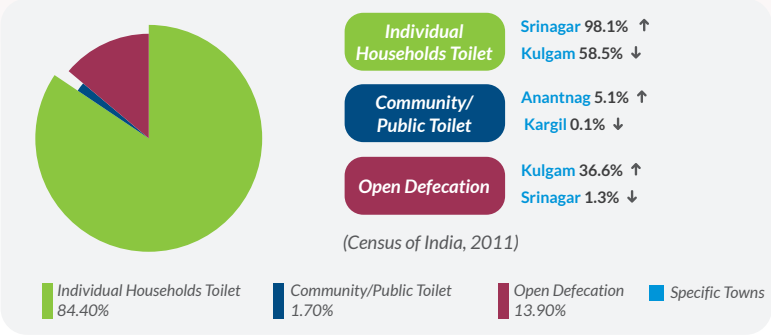
| Near Premises | Within Premises | Away |
|---|---|---|
| ↑ Shupiyan 94.8% | ↑ NA | ↑ Kargil 33.9% |
| ↓ NA | ↓ Kishtwar 3.2% | ↓ Shupiyan 0.1% |

*(Census of India, 2011)*

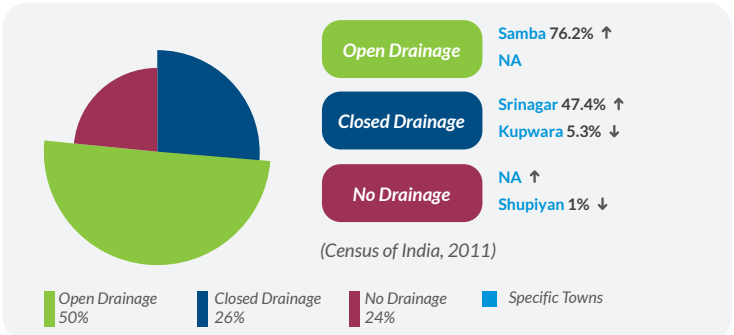
*Specific Cities*

# Access to Sanitation

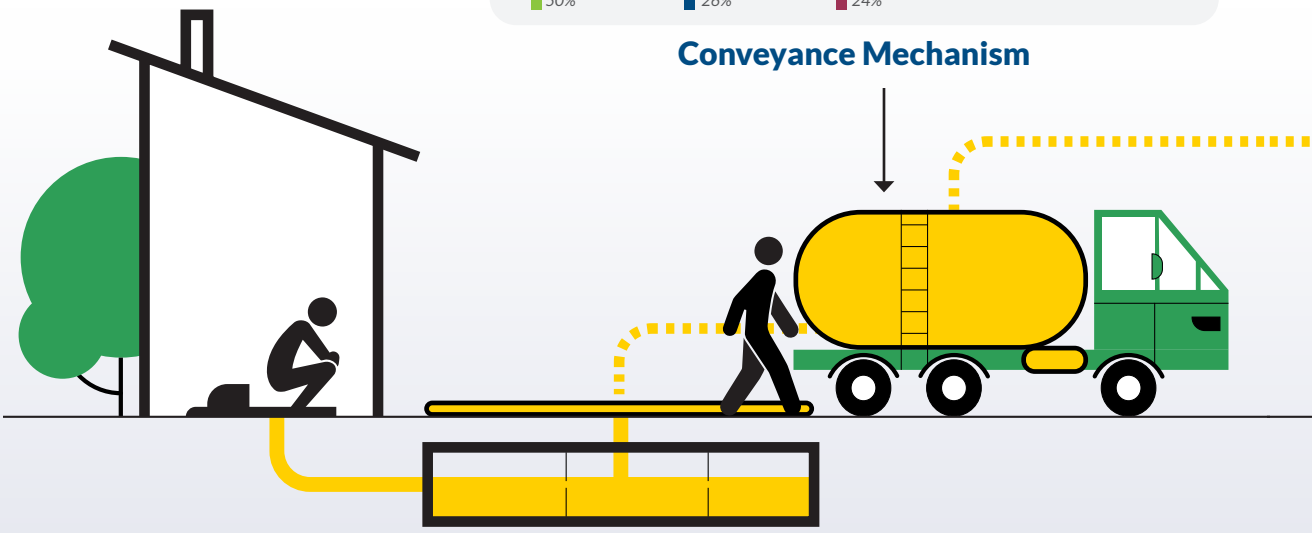
The state has secured no rank in Swachh Survekshan 2021.
Total ULB/Cities – 80 | Individual Household Toilet Target: 59600 | Target Achieved: 86%
Community/Public Toilet Target: 3585 | Target Achieved: 96.3%
**ODF: 80 ULBs | ODF+: 18 ULBs**



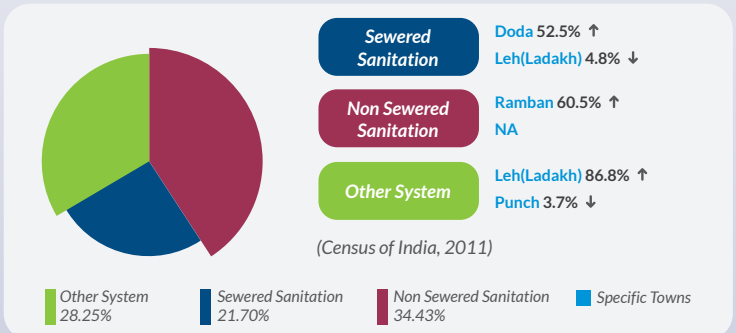

## Access to Toilet



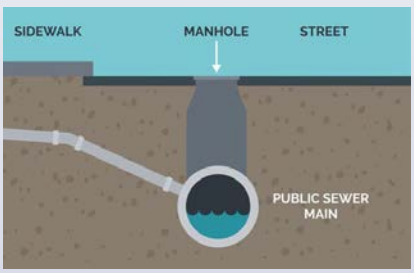

## Conveyance Mechanism



## Containment*




*Attributing percentage of Individual Household Toilet




*Note- Drainage refers to type of drainage connectivity for waste water outlet connected to sewered or non-sewered sanitation system. Closed drainage refers to sewered sanitation system. Open drainage refers to non-sewered sanitation and other systems connected to open drains. No drainage refers to having onsite disposal mechanism*

*Total Treatment capacity:*
**222 MLD**
*Installed STP capacity:*
**218 MLD**
*Operational STP Capacity:*
**93 MLD**
*FSTP Capacity*
**242 KLD**

*Proposed STP capacity*

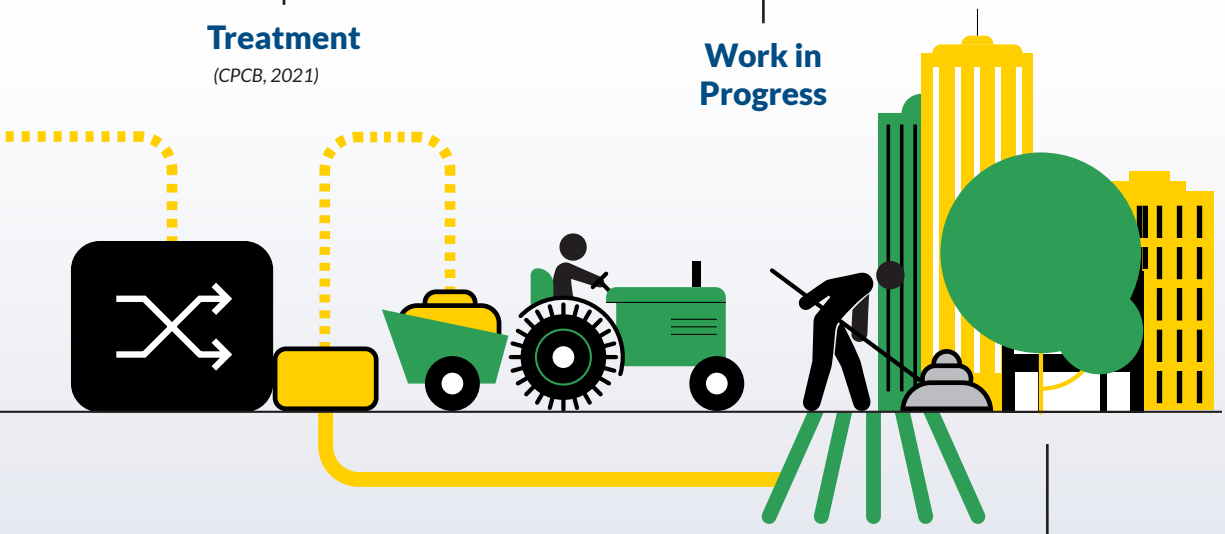
**4 MLD**

*Total Sewage generation*
**665 MLD**

## Treatment

*(CPCB, 2021)*

## Work in Progress



## Enduse/Disposal

No Reuse and discharge in open

# Solid Waste Management

**No Garbage Free City**


*(SBM Urban,2022)*

# School Sanitation

29,092 Institutions

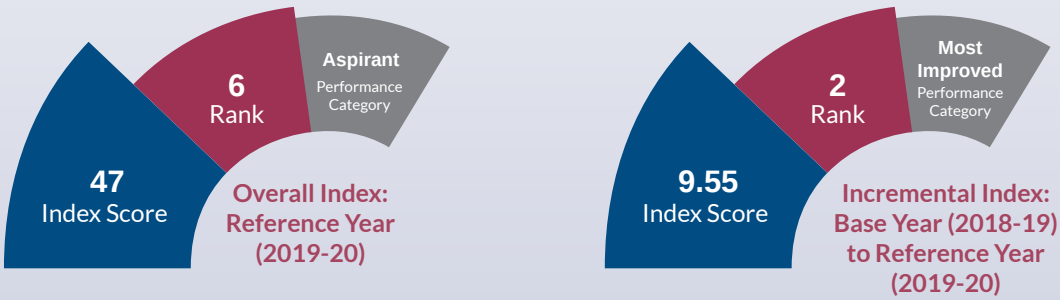
92.35% Drinking Water Facility

95% Girls' Toilet

*Source: (National Institute of Educational Planning & Administration, 2018) [8]*

*Note: Institutions include primary, upper primary, secondary and senior secondary schools.*

# Health and Hygiene




*(Ministry of Health and Family Welfare, 2021)[9]*

*Note: Health Index: A weighted composite index based on 24 indicators under the domain of health outcomes, governance and information and key inputs and processes. It is a tool which measures health which changes over time for different geographic areas.*

# Status of National Missions and Programs

| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Anantnag, Jammu, Kargil, Leh, Ladakh, Srinagar | Srinagar, Jammu |

## SBM Budget Allocation

| Funds Released | | Funds Utilised |
|---|---|---|
| 121.07 crores | SBM 1.0 | 81% |

| Funds Released | | Funds Utilised |
|---|---|---|
| NIL | SBM 2.0 | NIL |

*(Ministry of Housing & Urban Affairs, 2021) [4]*

## Total AMRUT 1.0 Budget: INR INR 593.05 crore (2015 – 2020)

## Total AMRUT 2.0 Budget: INR 856 crore (2021 – 2026)

### Water Supply

01 Project

10.98% Budget

### Sewerage and Septage Management

01 Project

19.38% Budget

### Drainage

01 Project

32.98% Budget

*(State Annual Action Plan (SAAP), J&K 2017-20)[5]*

# 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)

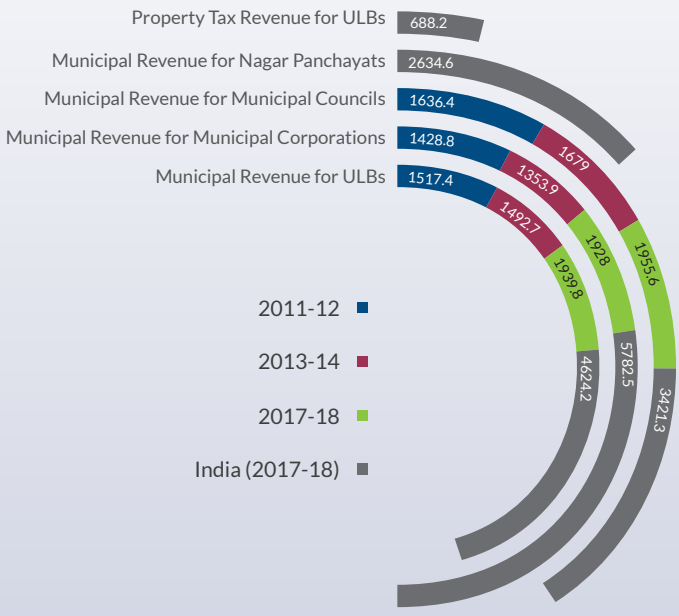
**As per 15th Finance commission report, no grant has been allotted to Jammu and Kashmir under 15th finance commission for year 2021-2026.**

**The share of states in the centre's taxes is recommended to be decreased from 42% during the 2015-20 period to 41% for 2020-21. The 1% decrease is to provide for the newly formed union territories of Jammu and Kashmir, and Ladakh from the resources of the central government under the devolution of taxes to states.**

*(15th Finance Commission Report for 2021-26)[6]*

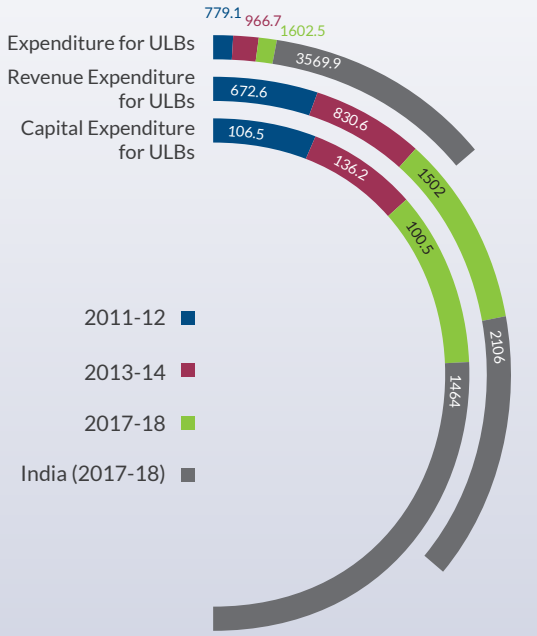
# State Municipal Finances

## Municipal Revenue [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

## Municipal Expenditures [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

# Bibliography


[1] *DES, "Land Use Statistics at a glance 2009-10 to 2018-19," p. 154, 2021, [Online]. Available: https://eands.dacnet.nic.in/LUS_2017-18/Land Use Statistics at a Glance 2008-09 to 2017-18.pdf*

[2] *Government of India, "Population Projections for India and States 2011 - 2036-Report of The Technical Group On Population Projections, July,2020," pp. 26–32, 2020, [Online]. Available: https://main.mohfw.gov.in/sites/default/files/Population Projection Report 2011-2036 - upload_compressed_0.pdf*

[3] *O. Mathur, D. Roy, A. Khare, and S. Mangla, "State of Municipal Finances in India," no. March, 2019.*

[4] *Ministry of Drinking Water & Sanitation, "Swachh Bharat Mission Objectives," no. June, p. 0, 2010, [Online]. Available: http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf*

[5] *AMRUT, "State Annual Action Plan (SAAP) 2017-20," 2017.*

[6] *India, "Report of the 15 th Finance Commission for 2021-26," no. 011, 2021, [Online]. Available: https://prsindia.org/files/policy/policy_committee_reports/Report Summary_15th FC_2021-26.pdf*

[7] *GoI, "SDG India Index & Dashboard 2020-21 report," Partnerships Decad. Action, p. 348, 2021, [Online]. Available: https://niti.gov.in/writereaddata/files/SDG_3.0_Final_04.03.2021_Web_Spreads.pdf*

[8] *Ministry of Human Resource Development, "Educational Statistics at a Glance 2018," Educ. Stat. a Glance, pp. 1–127, 2018, [Online]. Available: https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf*

[9] *NITI Aayog, "Health States Progressive India: Health Index Round IV 2019-20," Minist. Heal. Fam. Welf., no. 4, 2021, [Online]. Available: http://indiabudget.nic.in/ub2013-14/eb/sbe47.pdf*

# Ladakh

| | |
|---|---|
| Capital | Leh & Kargil |
| Districts | 2 |
| Area | 59,146 km$^2$ |
| Total Population (2011) | 2,74,289 |
| Density | 4.64 persons/km$^2$ |
| Elevation | 4,308.61 m above MSL |

*Source: Various*


## Geography

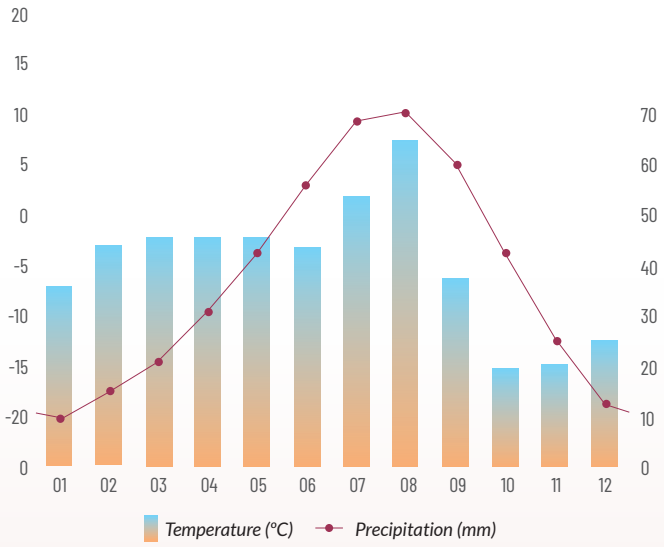
Ladakh is a region administered by India as a Union Territory since October 2019. Ladakh is bordered by the Tibet Autonomous Region to the east, the Indian state of Himachal Pradesh to the south, both the Indian-administered union territory of Jammu and Kashmir and the Pakistan-administered Gilgit-Baltistan to the west, and the southwest corner of Xinjiang across the Karakoram Pass in the far north. It extends from the Siachen Glacier in the Karakoram range to the north to the main Great Himalayas to the south.

## Climate

Ladakh has a subarctic, dry winter, cool summer climate.

| | |
|---|---|
| Yearly average temperature | -10.6°C |
| Annual precipitation | 80-120 mm/year |
| Rainy days | 113.63 rainy days |

*Source: Various*




| Municipal Corporations | | | |
|---|---|---|---|
| Number | 0 | Area (sq.km.) | 0 |
| Population (Lakh) | 0 | Population Density (persons/sq/km.) | 0 |

| Municipal Councils | | | |
|---|---|---|---|
| Number | 2 | Area (sq.km.) | 18.08 |
| Population (Lakh) | 0.47 | Population Density (persons/sq/km.) | 26.10 |

| Nagar Panchayats | | | |
|---|---|---|---|
| Number | 0 | Area (sq.km.) | 0 |
| Population (Lakh) | 0 | Population Density (persons/sq/km.) | 0 |

*Census 2011*

## Status of National Missions and Programs

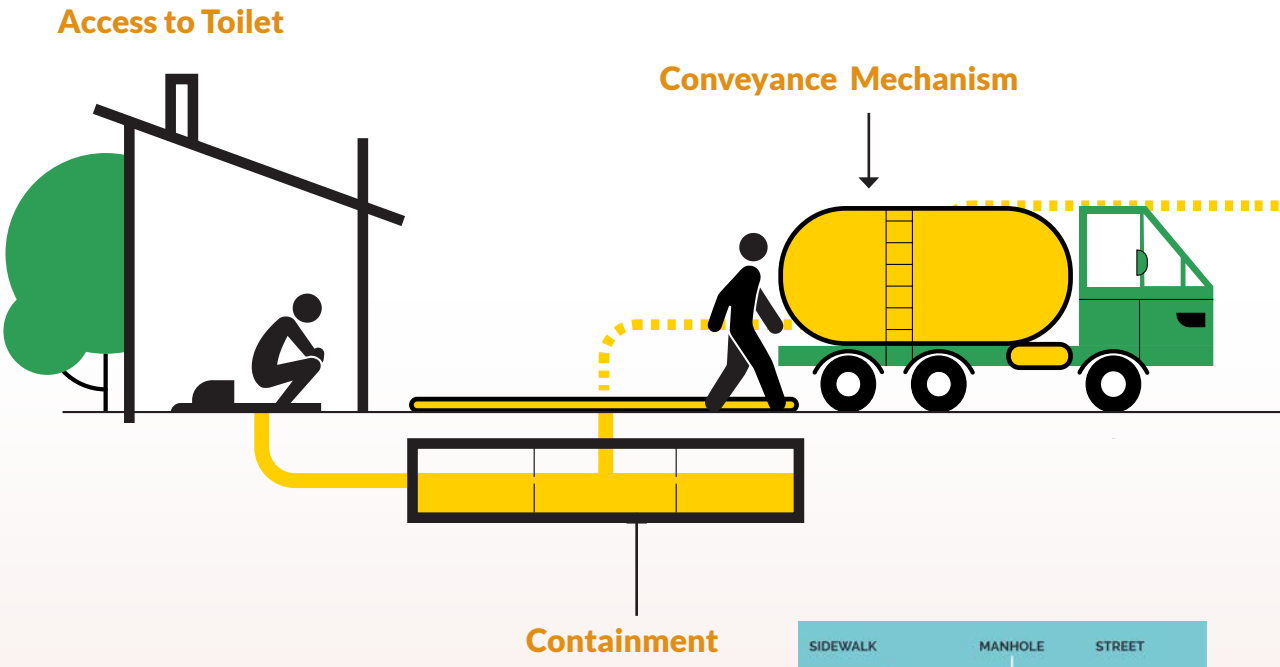
| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Leh Ladakh | - |

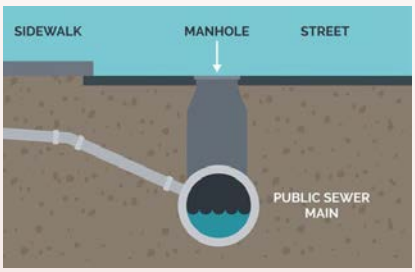
### Total AMRUT 2.0 Budget: INR 124 crore (2021 – 2026)

## 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)

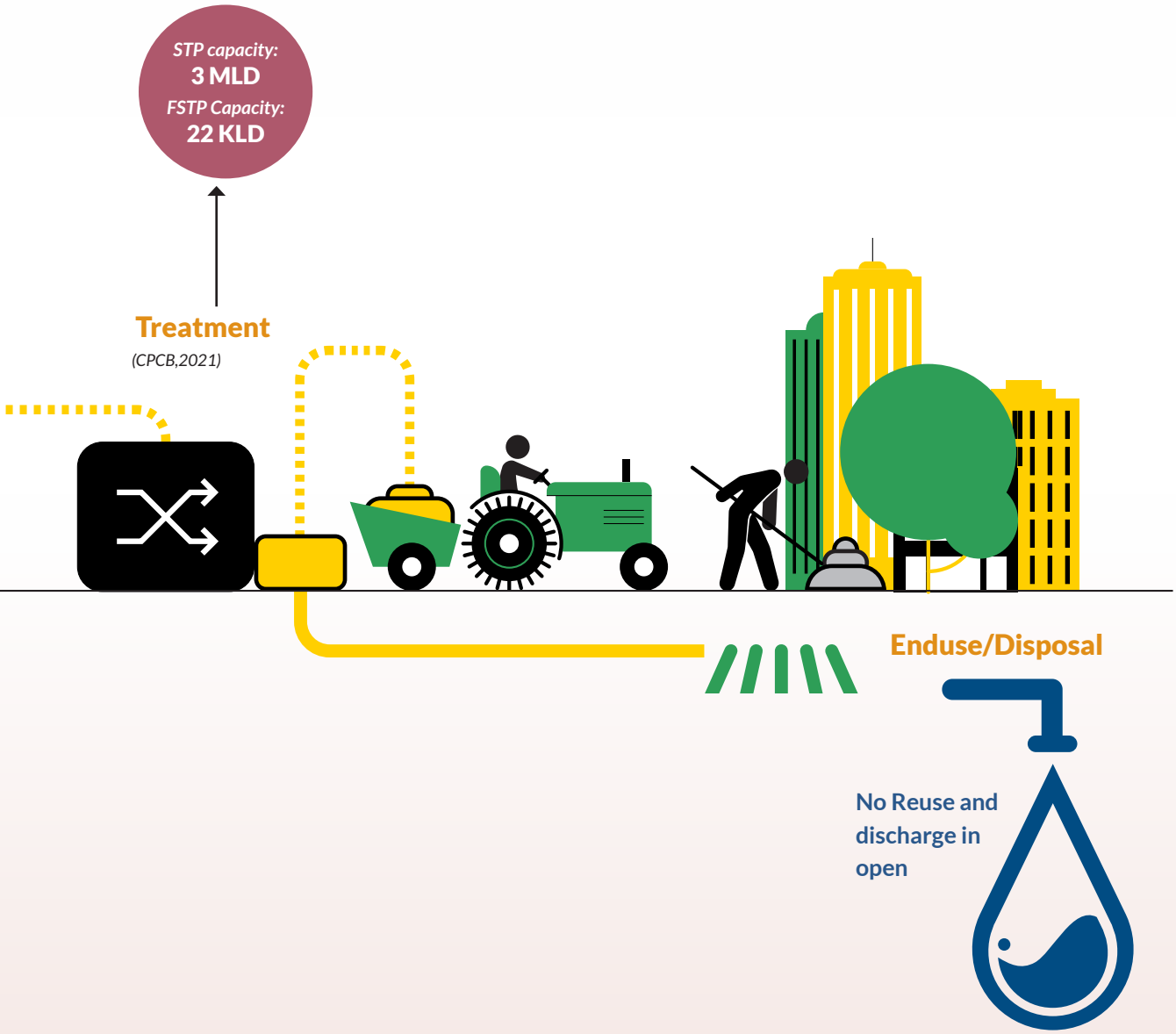
The adjustment of 1% is to provide for the newly formed union territories of Jammu and Kashmir, and Ladakh from the resources of the centre.

*(15th Finance Commission Report for 2021-26)[2]*




*Note- Drainage refers to type of drainage connectivity for waste water outlet connected to sewered or non-sewered sanitation system. Closed drainage refers to sewered sanitation system. Open drainage refers to non-sewered sanitation and other systems connected to open drains. No drainage refers to having onsite disposal mechanism*




(SBM Urban,2022)

## Access to Sanitation

The state has achieved 0 ranks in Swachh Survekshan 2021.
Total ULB/Cities – 2
Individual Household Toilet Target: 400| Target Achieved: 100 %
Community/Public Toilet Target: 194| Target Achieved: 100 %
**ODF: 2 ULBs**

## Solid Waste Management

**No Garbage Free City**

# Manipur

| | |
|---|---|
| Capital | Imphal |
| Districts | 16 |
| Area | 22,327 km² |
| Hilly area | 19,768 km² |
| Valley region | 2,559 km² |
| Total Population (2011) | 28,55,794 |
| Density | 128 persons / km² |
| Elevation | 790 m above MSL |

*Source: Various*


## Geography

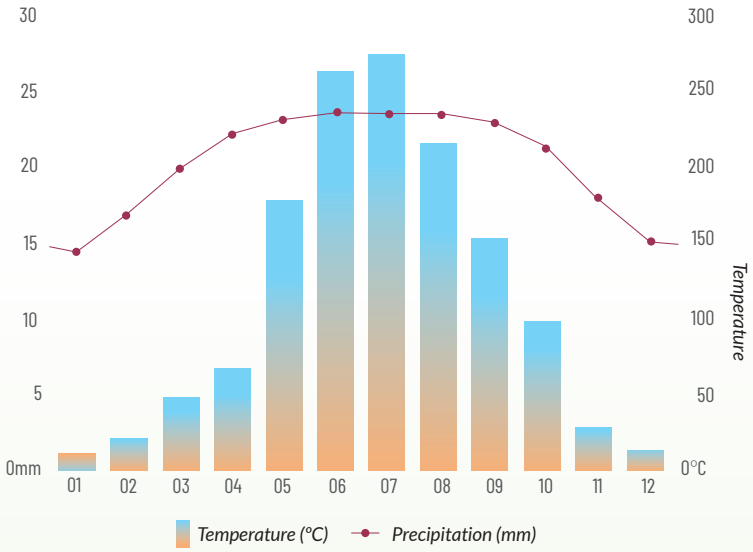
The state capital lies in an oval-shaped valley of approximately 2,000 km², surrounded by mountains. The slope of the valley is from north to south towards Loktak Lake which is the largest freshwater lake in South Asia.

## Climate

The mountain ranges create a moderate climate, preventing the cold winds from the north from reaching the valley and barring cyclonic storms. Manipur has a humid subtropical, dry winter climate.

| | |
|---|---|
| Yearly average temperature | 21.77°C |
| Annual precipitation | 110.92 mm |
| Rainy days | 161.2 rainy days |

*Source: Various*

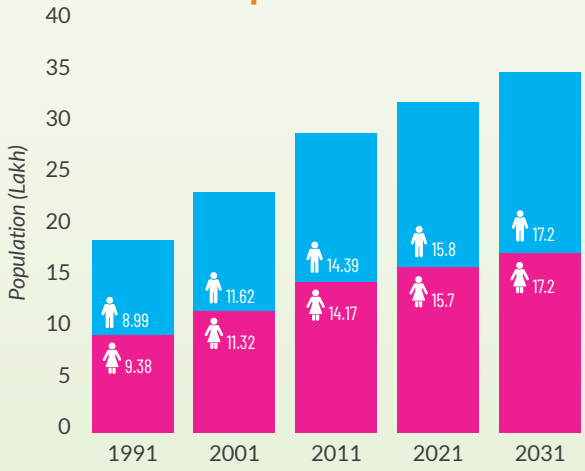



## Demography

As per census 2011, 70.79% of the total population resides in urban areas and 29.21% resides in rural areas.

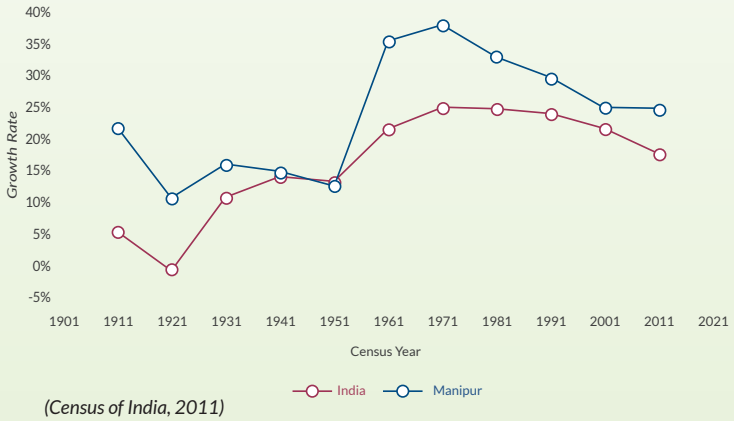
### Sex Ratio


### Population



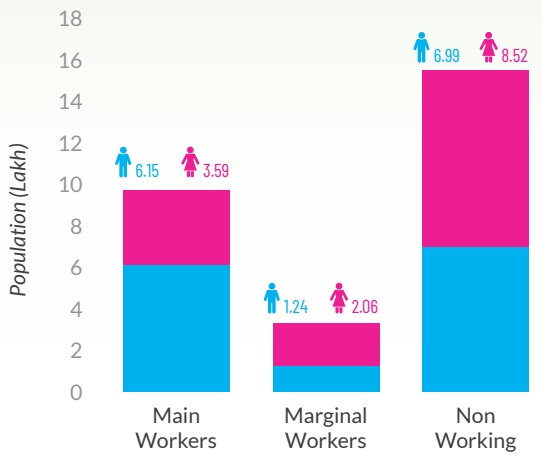

*(Ministry of Health & Family Welfare, 2020)[2]*

### Decadal Variation



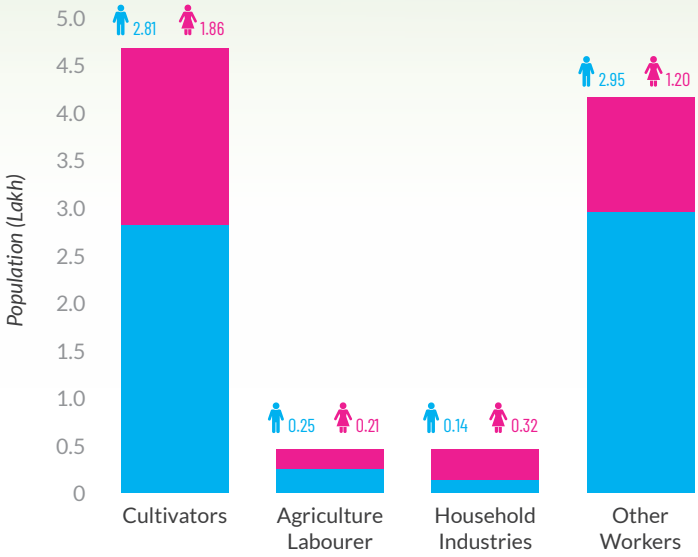

*(Census of India, 2011)*

## Working & Non Working Population

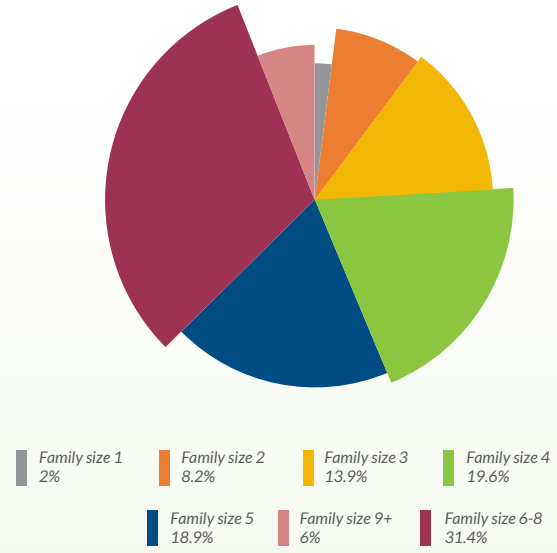



(Census of India, 2011)

## Main Workers

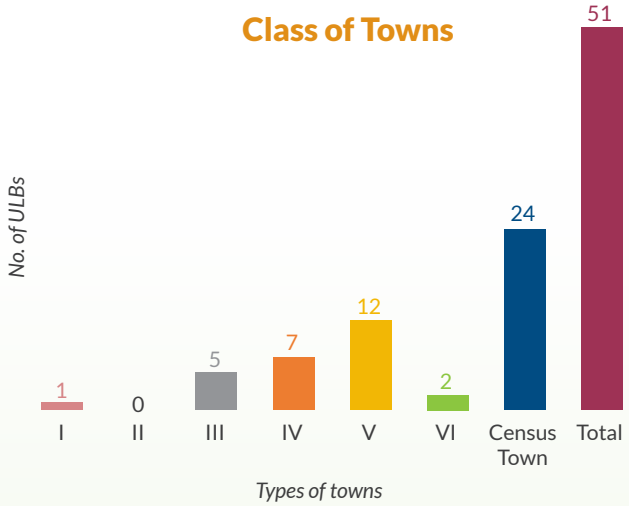



## Family Size




*Population range for each class of city*

## Class of Towns




*(Census of India, 2011)*

## Urban Local Body (ULB)

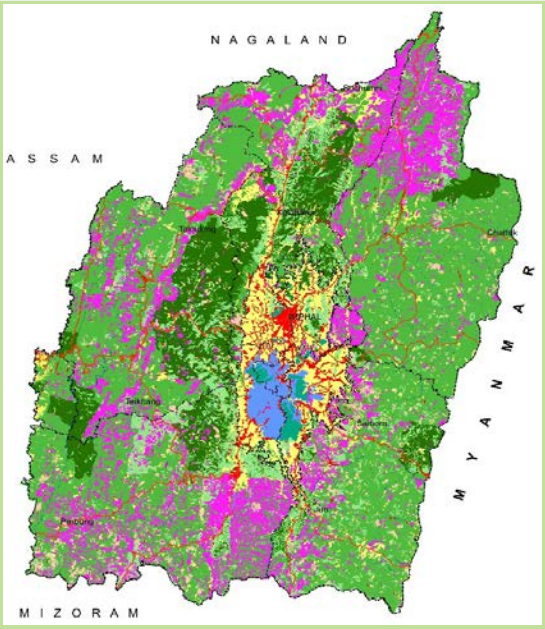
| Municipal Corporations | | | |
|---|---|---|---|
| Number | 1 | Area (sq.km.) | 29.57 |
| Population (Lakh) | 2.7 | Population Density (persons/sq/km.) | 9131 |

| Municipal Councils | | | |
|---|---|---|---|
| Number | 21 | Area (sq.km.) | 180.89 |
| Population (Lakh) | 3.1 | Population Density (persons/sq/km.) | 1714 |

| Nagar Panchayats | | | |
|---|---|---|---|
| Number | 5 | Area (sq.km.) | 21 |
| Population (Lakh) | 0.4 | Population Density (persons/sq/km.) | 1905 |

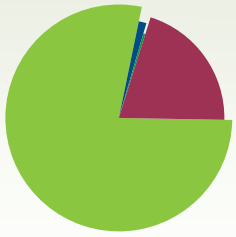
*(Indian Council for Research on International Economic Relations, 2019)[3]*

# Land use





*(ISRO, 2019)*



78% Forests
1.2% Not under Cultivable Land
20.4% Net sown area
0% Uncultivable land excluding Fallow Land
0.4% Fallow Land

| | |
|---|---|
| Geographical Area (Sq. Km.) | 2,233 |
| Area for Land Utilisation Statistics (Sq. Km.) | 2,161 |

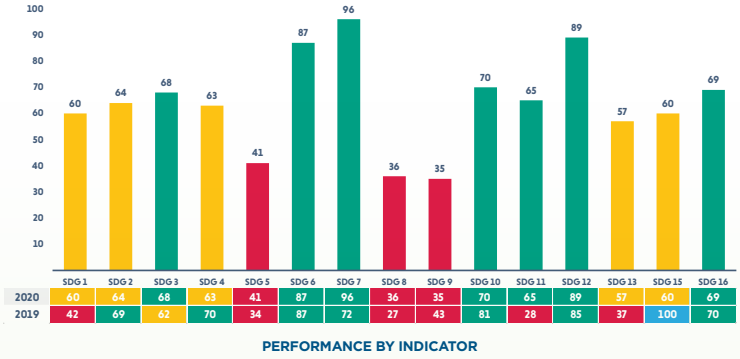
*(Ministry of Agriculture and Farmers Welfare, 2021)[1]*

# SDG Status

The SDG India Index and Dashboard is a crucial tool in India's SDG monitoring efforts. Designed and developed by NITI Aayog, the Index measures the progress at the national and sub-national levels towards meeting the Global Goals and targets


## Performance by Indicator

RANK: 16 Score: 64



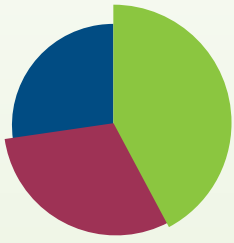

*(NITI Aayog and United Nations, 2021) [7]*

# Access to Water Supply

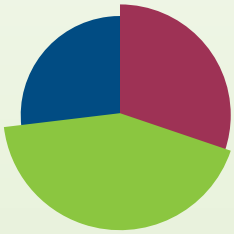
Imphal is the only AMRUT city in the project having piped water supply of 127.89 Km.

Indicators: ↑Highest ↓Lowest

## State Scenario



*Piped Water Supply 42%* *Groundwater 31%* *Surface Water Body 27%*



*Near Premises 43%* *Within Premises 30%* *Away 27%*

## Source of Water

| Piped Water Supply | Groundwater | Surface Water Body |
|---|---|---|
| ↑ Imphal West 72.8% | ↑ Churachandpur 81.8% | ↑ Thoubal 61.3% |
| ↓ Churachandpur 8.7% | ↓ Bishnupur 3.4% | ↓ Chandel 4.7% |

*Note - Piped Water connection includes supply of water sourced from groundwater i.e. Well, handpump, tubewell, borewell and spring, and surface water bodies i.e. River, canal, pond and lake.*

## Proximity to the Water Source

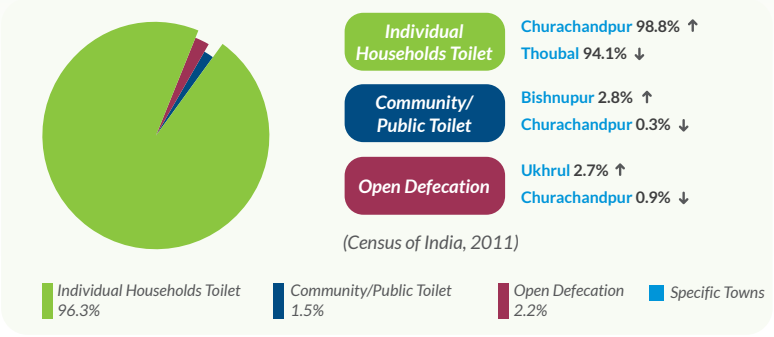
| Near Premises | Within Premises | Away |
|---|---|---|
| ↑ Senapati 56% | ↑ Chandel 47.4% | ↑ Thoubal 44.2% |
| ↓ Imphal West 28.3% | ↓ Thoubal 8.4% | ↓ Churachandpur 16.5% |

*(Census of India, 2011)*

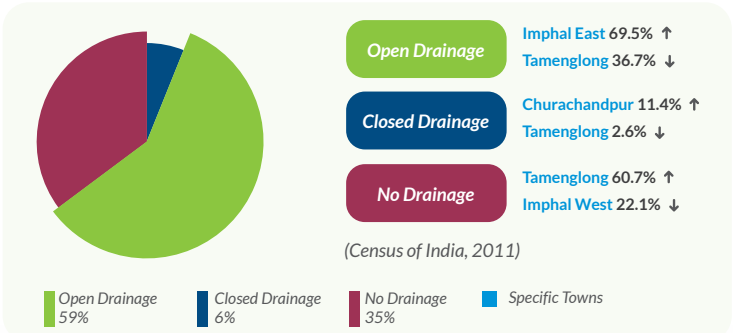
*Specific Cities*

# Access to Sanitation

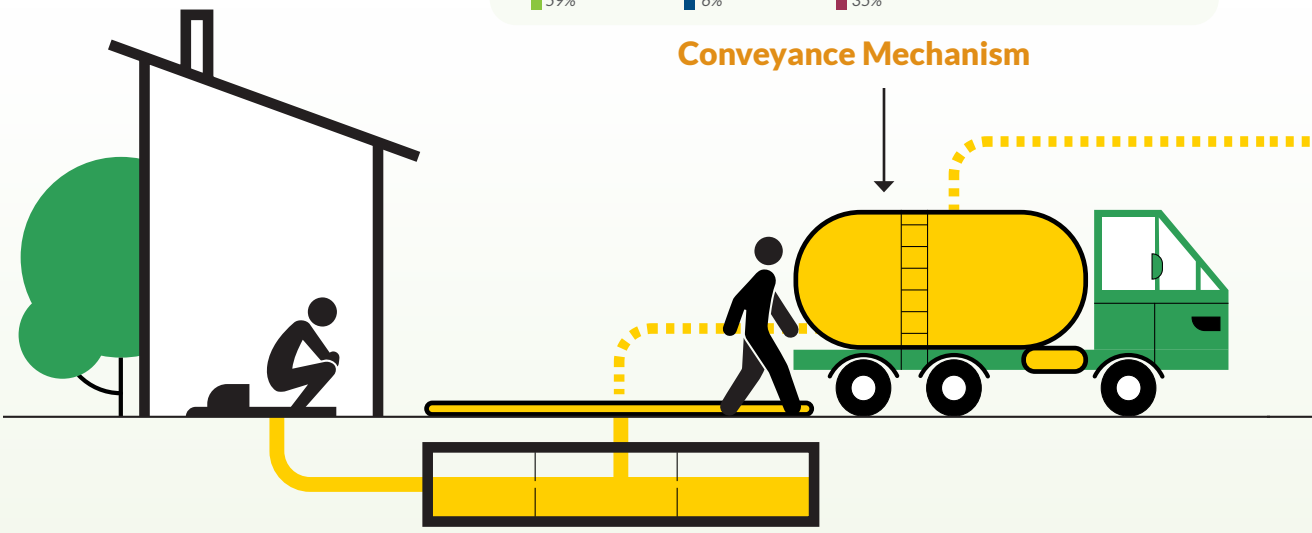
The state has secured 21st rank in Swachh Survekshan 2021.
Individual Household Toilet Target: 43,644 | Target Achieved: 89.90%
Community/Public Toilet Target: 620 | Target Achieved: 93.71%
**ODF: 27 ULBs | ODF+: 10 ULBs**



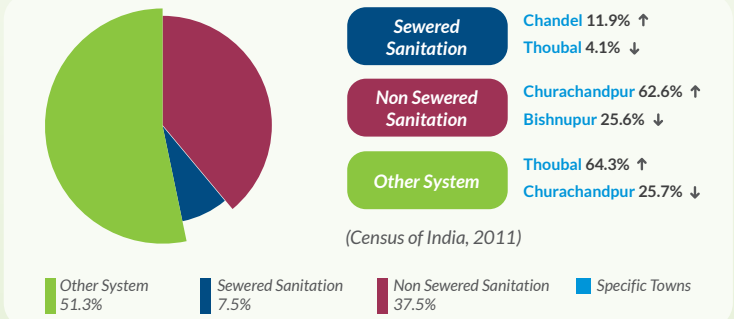

## Access to Toilet



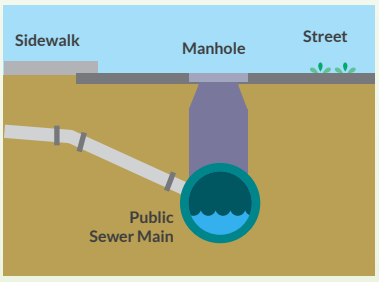

## Conveyance Mechanism



## Containment*




*Attributing percentage of Individual Household Toilet




*Notes- Non sewered sanitation means households having toilets connected to septic tank, Sewered sanitation means households having toilets connected to an underground (piped or otherwise) drainage system and other system refers to all the onsite sanitation systems without septic tank such as pit latrines etc.*

*Installed Capacity*

**27 MLD (Extended Aeration)**

*Under Construction STP Capacity*

**16 MLD (MBBR) + 1 MLD (MBBR)**

*Planned STP Capacity*

**49 MLD**

*Source: State Government of Manipur, 2022*

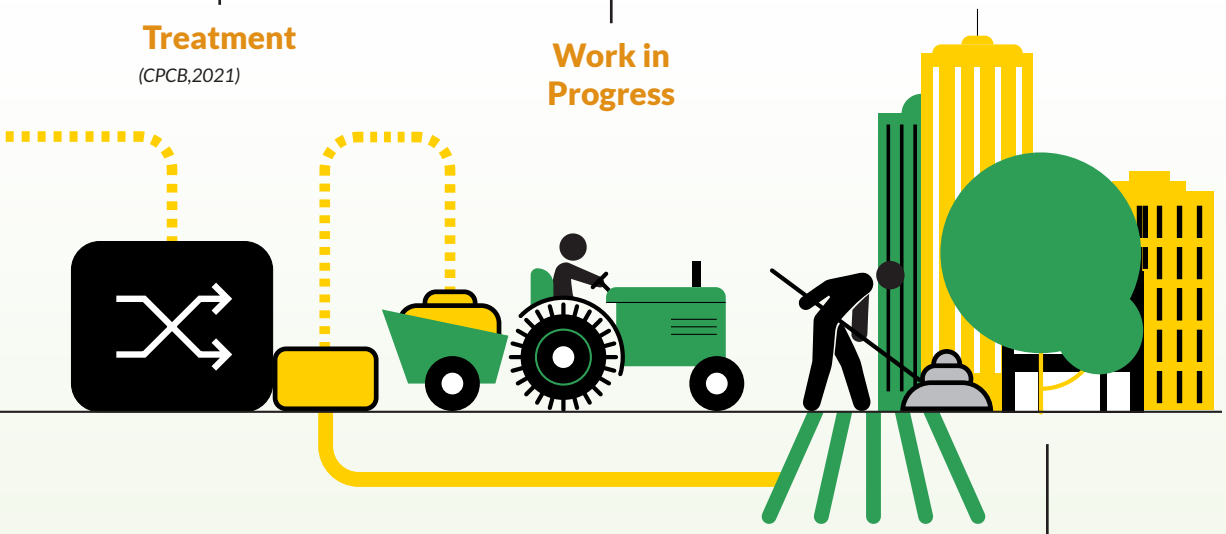
*No Functional Treatment Plant Available*

*Total Sewage generation*
**168 MLD**

## Treatment

*(CPCB,2021)*

## Work in Progress



## Enduse/Disposal

**No Reuse and discharge in open**

## Solid Waste Management


*(SBM Urban,2022)*

## School Sanitation

4,993 Institutions

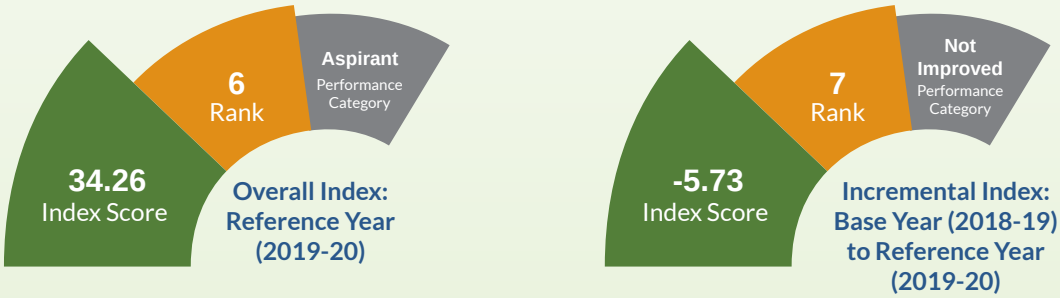
99.60% Drinking Water Facility

98.70% Girls' Toilet

*Source: (National Institute of Educational Planning & Administration, 2018) [8]*

*Note: Institutions include primary, upper primary, secondary and senior secondary schools.*

## Health and Hygiene




*(Ministry of Health and Family Welfare, 2021)[9]*

*Note: Health Index: A weighted composite index based on 24 indicators under the domain of health outcomes, governance and information and key inputs and processes. It is a tool which measures health which changes over time for different geographic areas.*

# Status of National Missions and Programs

| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Imphal | Imphal |

## SBM Budget Allocation

| Funds Released | SBM 1.0 | Funds Utilised |
|---|---|---|
| 38.9 crores | | 88% |

| Funds Released | SBM 2.0 | Funds Utilised |
|---|---|---|
| 17.9 crores | | NIL |

*(Ministry of Housing & Urban Affairs, 2021) [4]*

## Total AMRUT 1 Budget: INR 180.32 crore
## Total AMRUT 2 Budget: INR 169 crore

### Water Supply
03 Projects
98% Budget

### Sewerage and Septage Management
NIL Project
NIL Budget

### Drainage
NIL Project
NIL Budget

*(State Annual Action Plan (SAAP), Manipur 2015-16)[5]*

## 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)


*(15th Finance Commission Report for 2021-26)[6]*

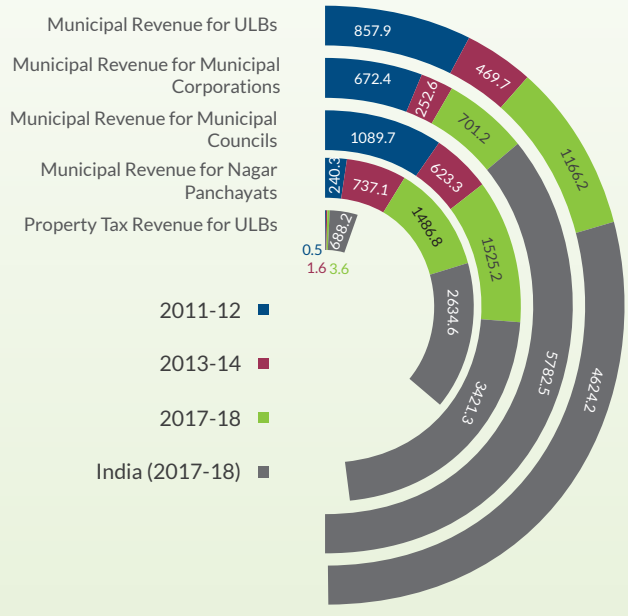
**Grants to local bodies** – Health grants, Rural local bodies, and Urban local bodies.

**Sector specific grants** – Health, PMGSY Roads, Statistics, Judiciary, Higher Education, Agriculture.

**State specific grants** – Social needs, administrative governance and infrastructure, water and sanitation, preservation of culture and historical monuments, high-cost physical infrastructure, and tourism.

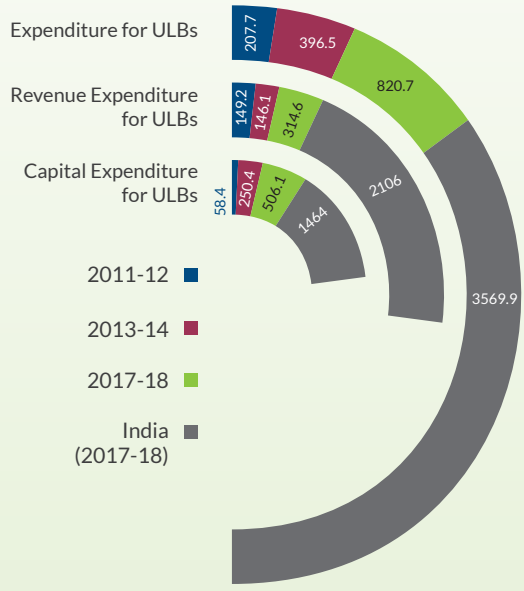
# State Municipal Finances

## Municipal Revenue [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

## Municipal Expenditures [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

# Bibliography


[1] *DES, "Land Use Statistics at a glance 2009-10 to 2018-19," p. 154, 2021, [Online]. Available: https://eands.dacnet.nic.in/LUS_2017-18/Land Use Statistics at a Glance 2008-09 to 2017-18.pdf*

[2] *Government of India, "Population Projections for India and States 2011 - 2036-Report of The Technical Group On Population Projections, July,2020," pp. 26–32, 2020, [Online]. Available: https://main.mohfw.gov.in/sites/default/files/Population Projection Report 2011-2036 - upload_compressed_0.pdf*

[3] *O. Mathur, D. Roy, A. Khare, and S. Mangla, "State of Municipal Finances in India," no. March, 2019.*

[4] *Ministry of Housing and Urban Affairs "Swachh Bharat Mission Urban ," no. June, p. 0, 2021, [Online]. Available: http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf*

[5] *AMRUT, "State Annual Action Plan (SAAP) 2015-16," 2016.*

[6] *GoI, "SDG India Index & Dashboard 2020-21 report," Partnerships Decad. Action, p. 348, 2021, [Online]. Available: https://niti.gov.in/writereaddata/files/SDG_3.0_Final_04.03.2021_Web_Spreads.pdf*

[7] *Ministry of Human Resource Development, "Educational Statistics at a Glance 2018," Educ. Stat. a Glance, pp. 1–127, 2018, [Online]. Available: https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf*

[8] *NITI Aayog, "Health States Progressive India: Health Index Round IV 2019-20," Minist. Heal. Fam. Welf., no. 4, 2021, [Online]. Available: http://indiabudget.nic.in/ub2013-14/eb/sbe47.pdf*

# Meghalaya

| | |
|---|---|
| Capital | Shillong |
| Districts | 12 |
| Area | 22,429 km$^2$ |
| Total Population (2011) | 2,966,889 |
| Density | 132.3 persons/km$^2$ |
| Elevation | 1,527.63 m above MSL |

*Source: Various*


## Geography

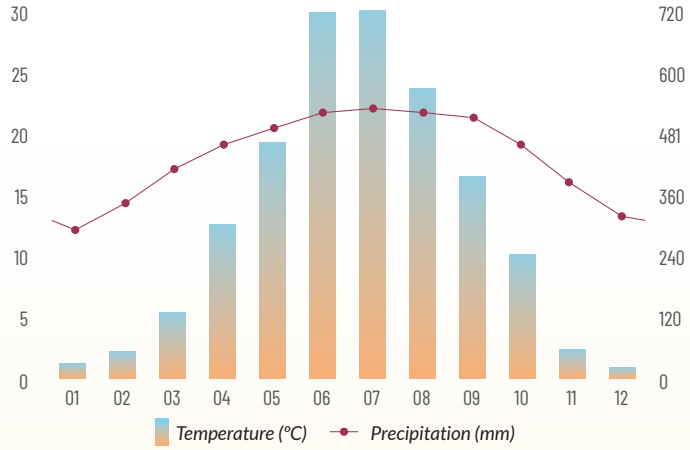
Meghalaya is in the hilly region of eastern sub-Himalayas. The State of Meghalaya is situated in North East India. It is situated on the north of Goalpara, Kamrup and Nagaon districts, on the east by Karbi Anglong and North Cachar Hills districts, all of Assam, and on the south and west by Bangladesh.

## Climate

Meghalaya has a humid subtropical, dry winter climate. Meghalaya is the wettest place on the Earth.

| | |
|---|---|
| Yearly average temperature | 19.06°C |
| Annual precipitation | 301.2 mm |
| Rainy days | 236.74 rainy days |

*Source: Various*

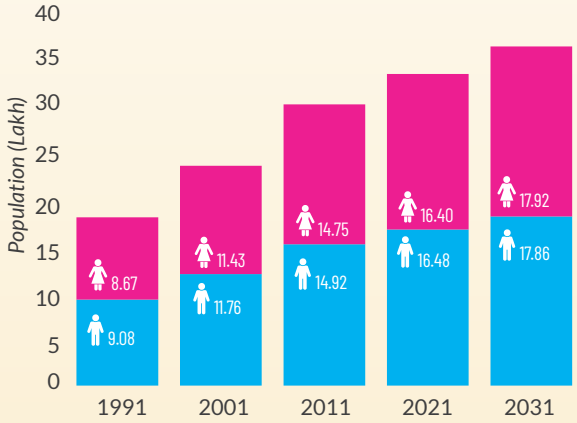



## Demography

As per census 2011, 20.07 % of the total population resides in urban areas and 79.93 % resides in rural areas.

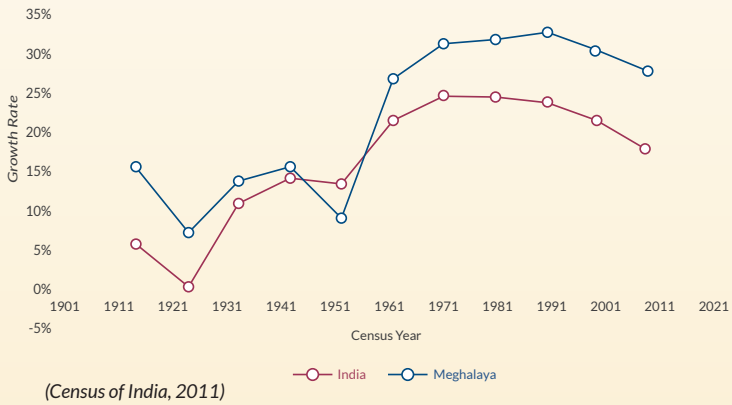
### Sex Ratio


### Population



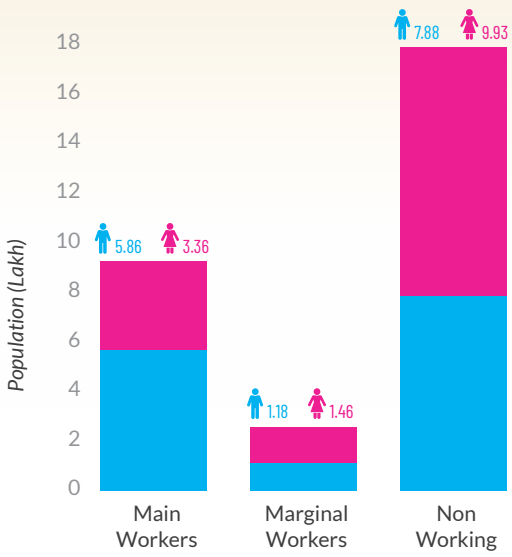

*(Ministry of Health & Family Welfare, 2020)[2]*

### Decadal Variation



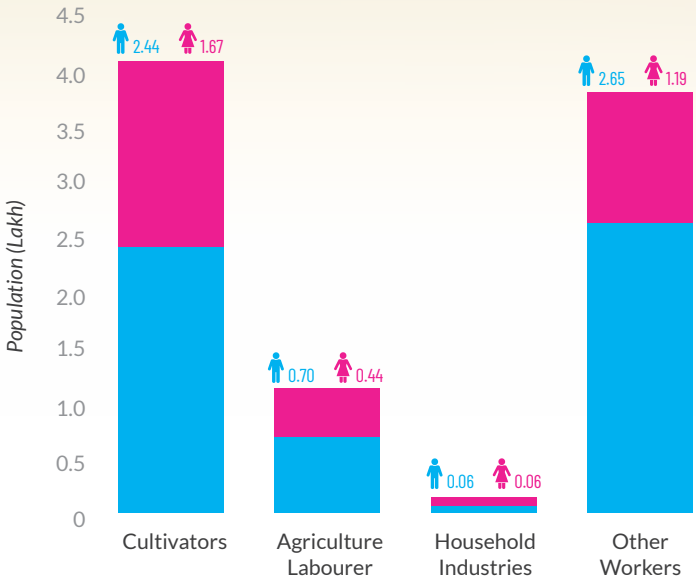

*(Census of India, 2011)*

## Working & Non Working Population

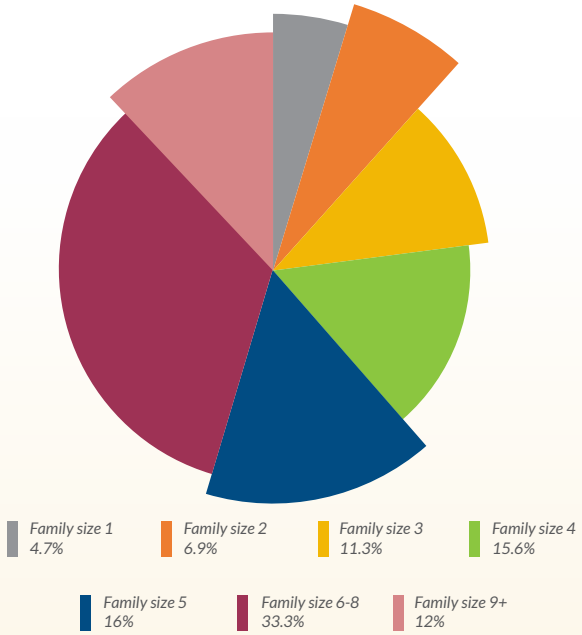



(Census of India, 2011)

## Main Workers

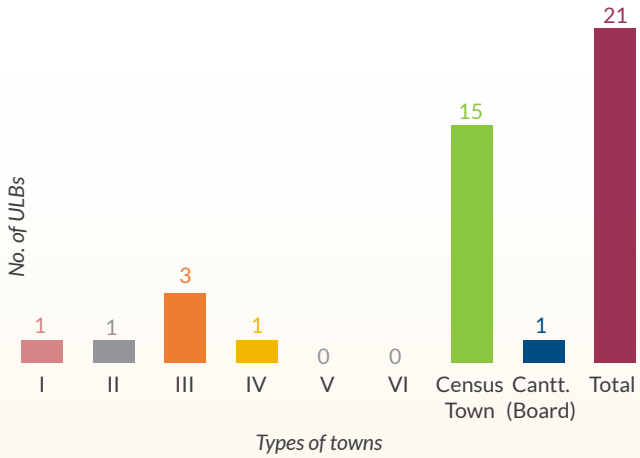



## Family Size




*Population range for each class of city*

## Class of Towns



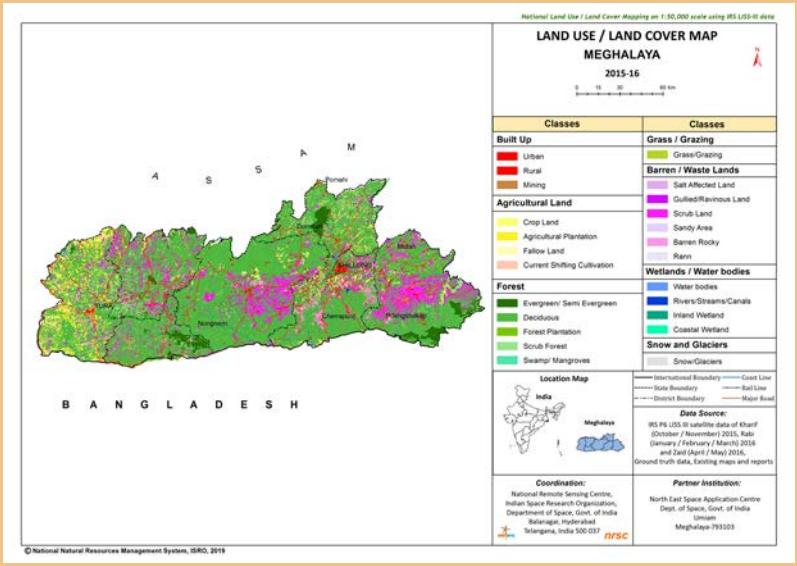

*(Census of India, 2011)*

## Urban Local Body (ULB)

| Municipal Corporations | | | | Municipal Councils | | | | Nagar Panchayats | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Number | 0 | Area (sq.km.) | 0 | Number | 6 | Area (sq.km.) | 62 | Number | 0 | Area (sq.km.) | 0 |
| Population (Lakh) | 0 | Population Density (persons/sq/km.) | 0 | Population (Lakh) | 3 | Population Density (persons/sq/km.) | 4,838 | Population (Lakh) | 00 | Population Density (persons/sq/km.) | 0 |

*(Indian Council for Research on International Economic Relations, 2019)[3]*

# Land use




*(ISRO, 2019)*

41% Forests
13% Not under Cultivable Land
12% Net sown area
25% Uncultivable land excluding Fallow Land
10% Total Fallow Land

| | |
|---|---|
| Geographical Area (Thousand Hectares) | 2,243 |
| Area for Land Utilisation Statistics (Thousand Hectares) | 2,196 |

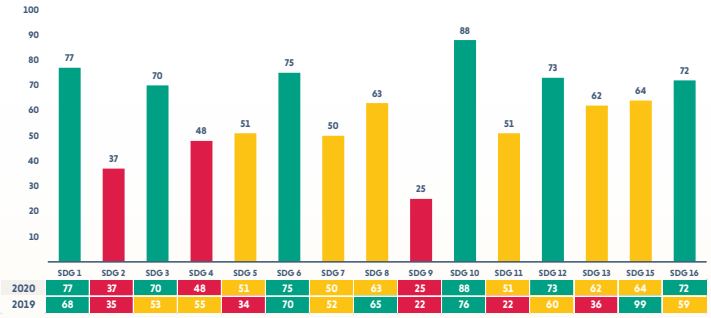
*(Ministry of Agriculture and Farmers Welfare, 2021)[1]*

# SDG Status

The SDG India Index and Dashboard is a crucial tool in India's SDG monitoring efforts. Designed and developed by NITI Aayog, the Index measures the progress at the national and sub-national levels towards meeting the Global Goals and targets


## Performance by Indicator

RANK: 23 Score: 60



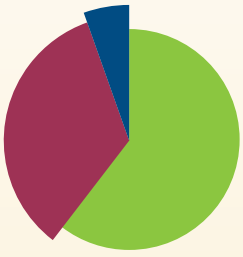

*(NITI Aayog and United Nations, 2021) [7]*

# Access to Water Supply

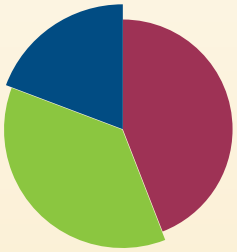
Indicators: ↑Highest ↓Lowest

Shillong has 76.89% piped water supply as per baseline in 2015 and AMRUT mission target is 100% piped water supply. Water supply project in Shillong is going under the JnNURM project.

## State Scenario



*Piped Water Supply 60.40%* *Groundwater 34.13%* *Surface Water Body 5.43%*



*Near Premises 36.66%* *Within Premises 44.10%* *Away 19.26%*

## Source of Water

| Piped Water Supply | Groundwater | Surface Water Body |
|---|---|---|
| ↑ East Khasi Hills 86% | ↑ South Garo Hills 69.8% | ↑ Ribhoi 15.7% |
| ↓ South Garo Hills 28.2% | ↓ East Khasi Hills 10.9% | ↓ South Garo Hills 2% |

*Note - Piped Water connection includes supply of water sourced from groundwater i.e. Well, handpump, tubewell, borewell and spring, and surface water bodies i.e. River, canal, pond and lake.*

## Proximity to the Water Source

| Near Premises | Within Premises | Away |
|---|---|---|
| ↑ West Khasi Hills 61.6% | ↑ East Garo Hills 64.3% | ↑ South Garo Hills 38.9% |
| ↓ East Garo Hills 23.2% | ↓ South Garo Hills 20.7% | ↓ East Garo Hills 11.8% |

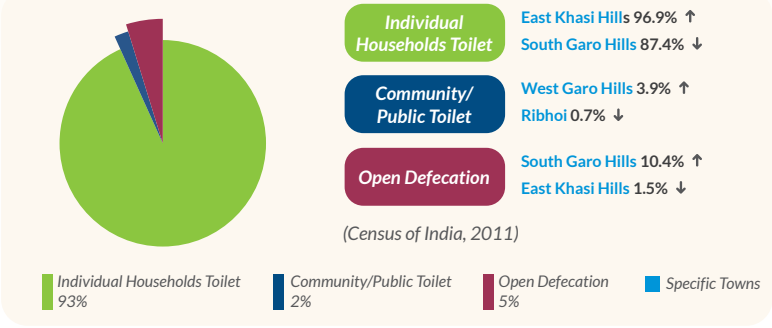
*(Census of India, 2011)*

*Specific Cities*

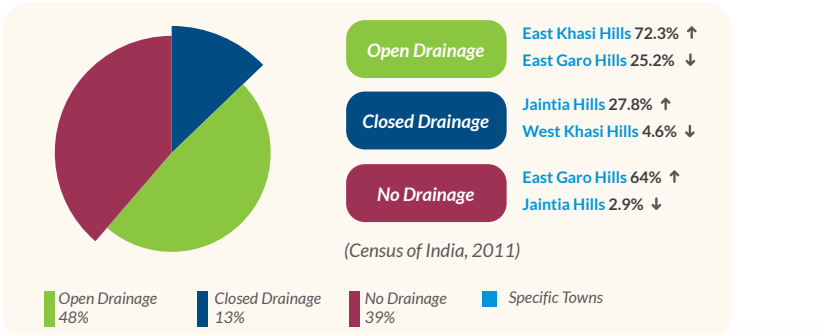
# Access to Sanitation

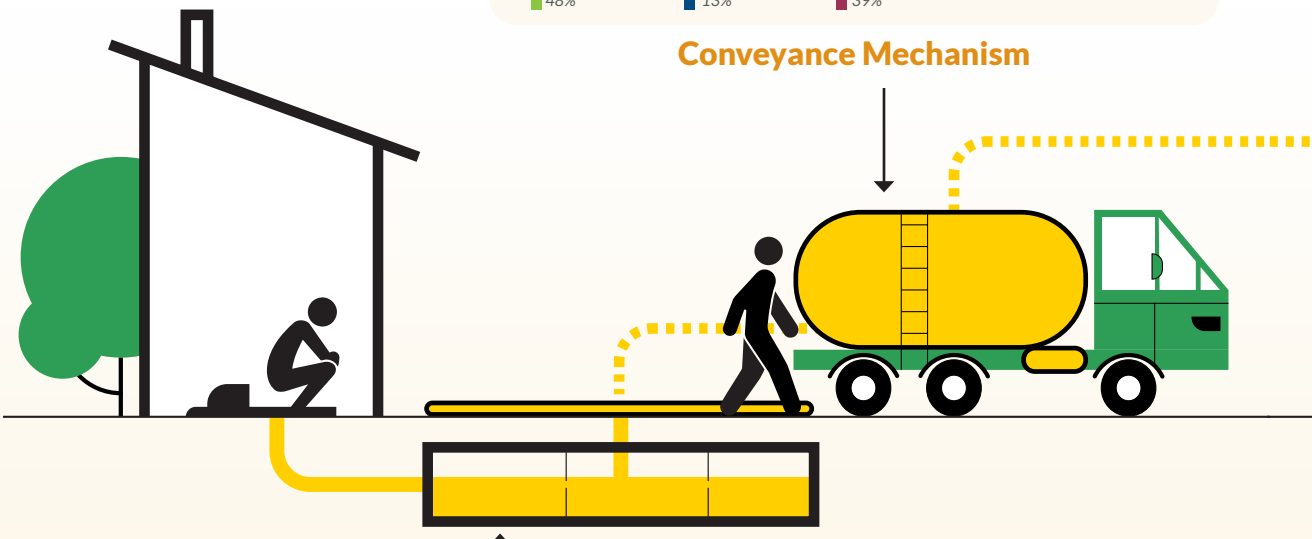
The state has secured 27th rank in Swachh Survekshan 2021.
Total ULB/Cities – 10 | Individual Household Toilet Target: 5,066 | Target Achieved: 31.7%
Community/Public Toilet Target: 362 | Target Achieved: 42%
**ODF: 10 ULBs | ODF+: 1 ULB**

## Access to Toilet

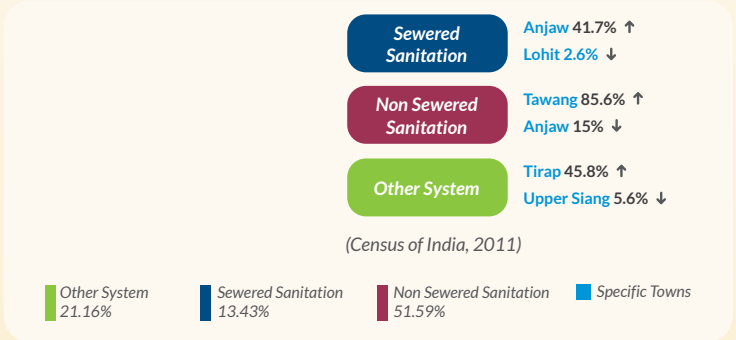



## Conveyance Mechanism

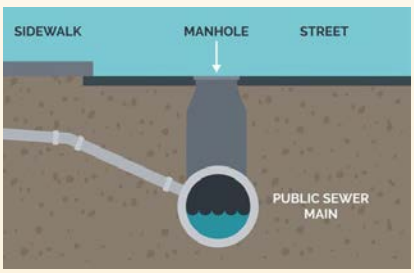


## Containment*




*Attributing percentage of Individual Household Toilet



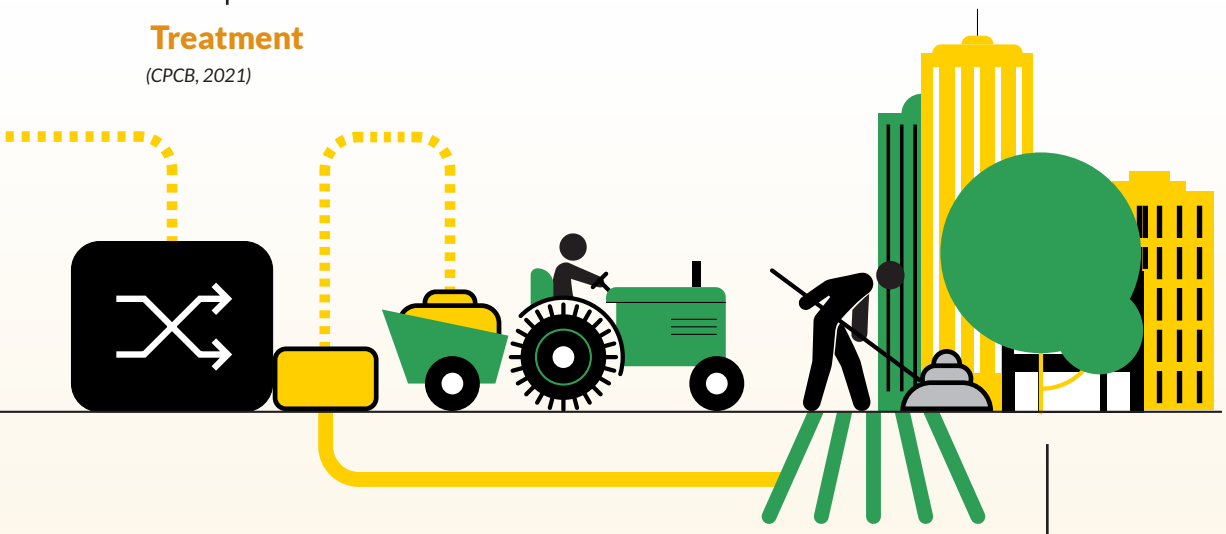

*Note- Drainage refers to type of drainage connectivity for waste water outlet connected to sewered or non-sewered sanitation system. Closed drainage refers to sewered sanitation system. Open drainage refers to non-sewered sanitation and other systems connected to open drains. No drainage refers to having onsite disposal mechanism*

*No Treatment Plant Available*

*Total Sewage generation*
**112 MLD**

## Treatment

*(CPCB, 2021)*



## Enduse/Disposal

**No Reuse and discharge in open**

## Solid Waste Management

**No Garbage Free City**


*(SBM Urban,2022)*

## School Sanitation

14,514 Institutions

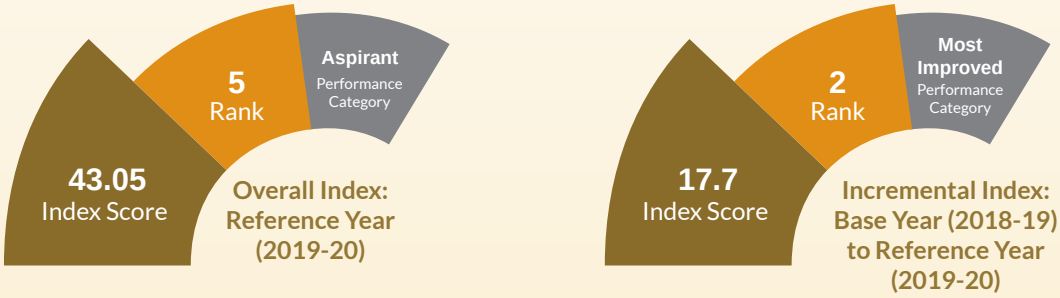
63.81% Drinking Water Facility

84.29% Girls' Toilet

*Source: (National Institute of Educational Planning & Administration, 2018) [8]*

*Note: Institutions include primary, upper primary, secondary and senior secondary schools.*

## Health and Hygiene




*(Ministry of Health and Family Welfare, 2021)[9]*

*Note: Health Index: A weighted composite index based on 24 indicators under the domain of health outcomes, governance and information and key inputs and processes. It is a tool which measures health which changes over time for different geographic areas.*

# Status of National Missions and Programs

| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Shillong | Shillong |

## SBM Budget Allocation

| Funds Released | | Funds Utilised |
|---|---|---|
| 6.61 crores | SBM 1.0 | 49% |

| Funds Released | | Funds Utilised |
|---|---|---|
| NIL | SBM 2.0 | NIL |

*(Ministry of Housing & Urban Affairs, 2021) [4]*

## Total AMRUT 1.0 Budget: INR 80.14 crore (2015 – 2020)

## Total AMRUT 2.0 Budget: INR 110 crore (2021 – 2026)

### Water Supply

NIL Projects

NIL Budget

### Sewerage and Septage Management

01 Project

96.67% Budget

### Drainage

NIL Project

NIL Budget

*(State Annual Action Plan (SAAP), Arunachal Pradesh 2017-20)[5]*

## 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)


*(15th Finance Commission Report for 2021-26)[6]*

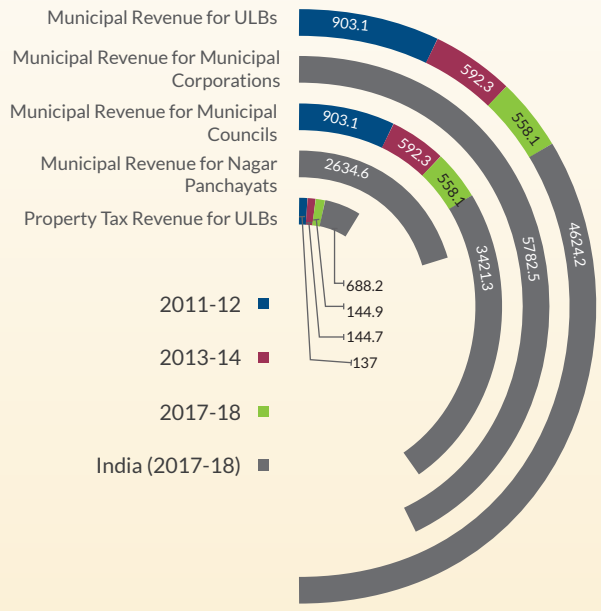
**Grants to local bodies** – Health grants, Rural local bodies, and Urban local bodies.

**Sector Specific grants** – Health, PMGSY Roads, Statistics, Judiciary, Higher Education, Agriculture.

**State specific grants** - Social needs, administrative governance and infrastructure, water and sanitation, preservation of culture and historical monuments, high-cost physical infrastructure, and tourism.

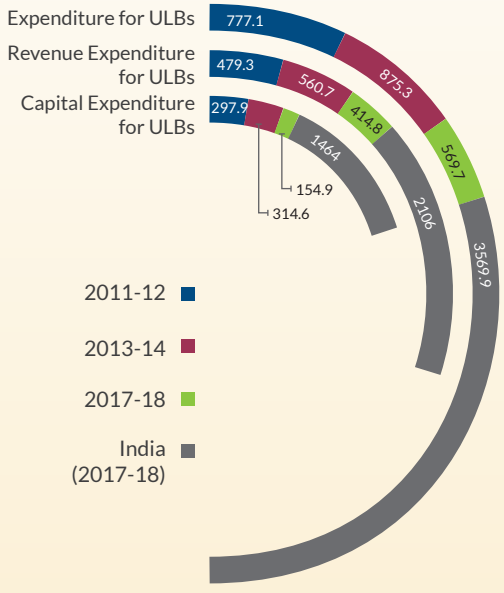
# State Municipal Finances

## Municipal Revenue [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

## Municipal Expenditures [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

# Bibliography


[1] *DES, "Land Use Statistics at a glance 2009-10 to 2018-19," p. 154, 2021, [Online]. Available: https://eands.dacnet.nic.in/LUS_2017-18/Land Use Statistics at a Glance 2008-09 to 2017-18.pdf*

[2] *Government of India, "Population Projections for India and States 2011 - 2036-Report of The Technical Group On Population Projections, July,2020," pp. 26–32, 2020, [Online]. Available: https://main.mohfw.gov.in/sites/default/files/Population Projection Report 2011-2036 - upload_compressed_0.pdf*

[3] *O. Mathur, D. Roy, A. Khare, and S. Mangla, "State of Municipal Finances in India," no. March, 2019.*

[4] *Ministry of Drinking Water & Sanitation, "Swachh Bharat Mission Objectives," no. June, p. 0, 2010, [Online]. Available: http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf*

[5] *AMRUT, "State Annual Action Plan (SAAP) 2017-20," 2017.*

[6] *India, "Report of the 15 th Finance Commission for 2021-26," no. 011, 2021, [Online]. Available: https://prsindia.org/files/policy/policy_committee_reports/Report Summary_15th FC_2021-26.pdf*

[7] *GoI, "SDG India Index & Dashboard 2020-21 report," Partnerships Decad. Action, p. 348, 2021, [Online]. Available: https://niti.gov.in/writereaddata/files/SDG_3.0_Final_04.03.2021_Web_Spreads.pdf*

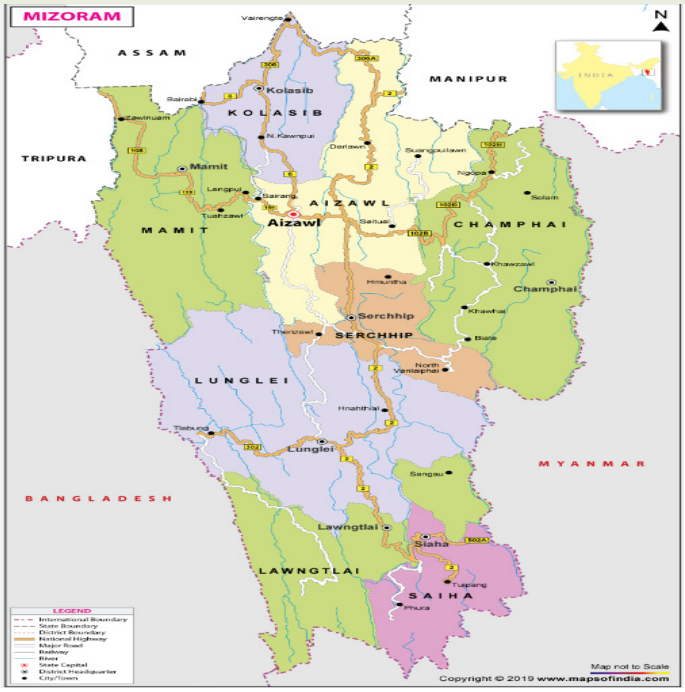
[8] *Ministry of Human Resource Development, "Educational Statistics at a Glance 2018," Educ. Stat. a Glance, pp. 1–127, 2018, [Online]. Available: https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf*

[9] *NITI Aayog, "Health States Progressive India: Health Index Round IV 2019-20," Minist. Heal. Fam. Welf., no. 4, 2021, [Online]. Available: http://indiabudget.nic.in/ub2013-14/eb/sbe47.pdf*

# Mizoram

| | |
|---|---|
| Capital | Aizawl |
| Districts | 11 |
| Area | 21,081km$^2$ |
| Total Population (2011) | 10,91,014 |
| Density | 52.05 persons/km$^2$ |
| Elevation | 592.0 m above MSL |

*Source: Various*




## Geography

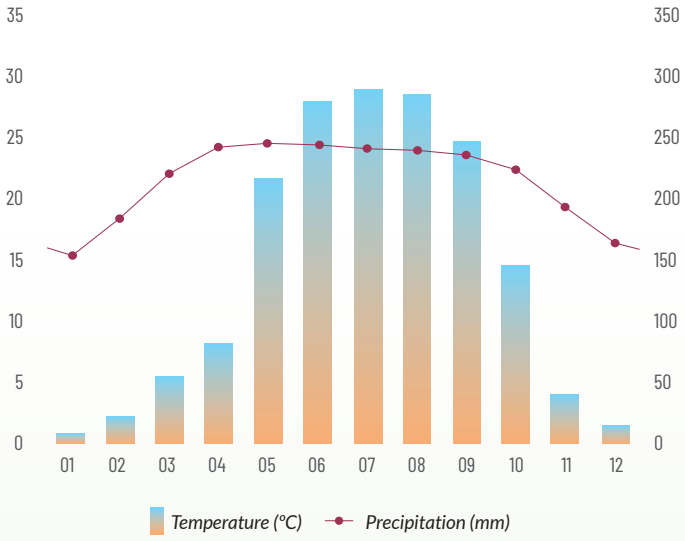
Mizoram is a state in north east India whose southern part shares long international borders with Myanmar and Bangladesh and the northern part shares a domestic border with Manipur, Assam and Tripura. It is the fifth smallest state of India extending from 21°56'N to 24°31'N, and 92°16'E to 93°26'E. Mizoram is a land of rolling hills, valleys, rivers and lakes. The biggest river in Mizoram is Chhimtuipui, also known as Kaladan.

## Climate

Mizoram has a mild climate, being relatively cool in summer but progressively warmer, most probably due to climate change. The state has regions where cyclones and landslides can cause weather-related emergencies.

| | |
|---|---|
| Yearly average temperature | 24.75°C |
| Annual precipitation | 128.9 mm |
| Rainy days | 173.25 rainy days |

*Source: Various*

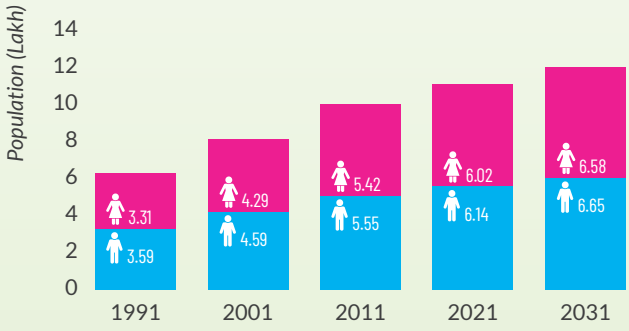



## Demography

As per census 2011, 52.11 % of the total population resides in urban areas and 47.89 % resides in rural areas.

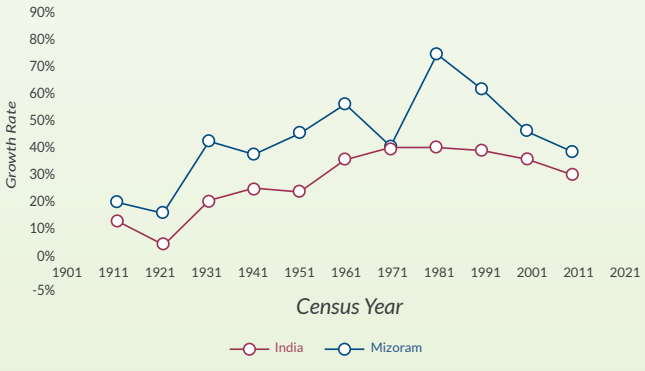
### Sex Ratio


### Population



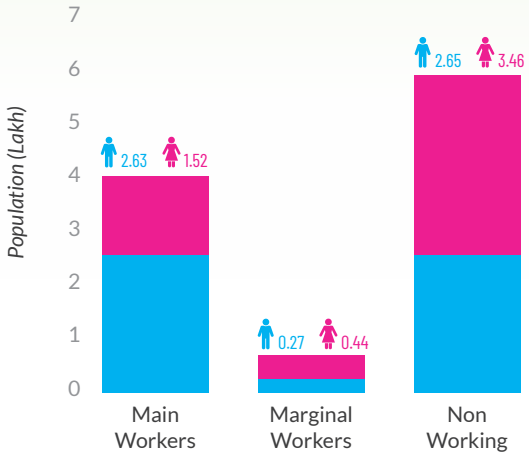

*(Ministry of Health & Family Welfare, 2020)[2]*

### Decadal Variation



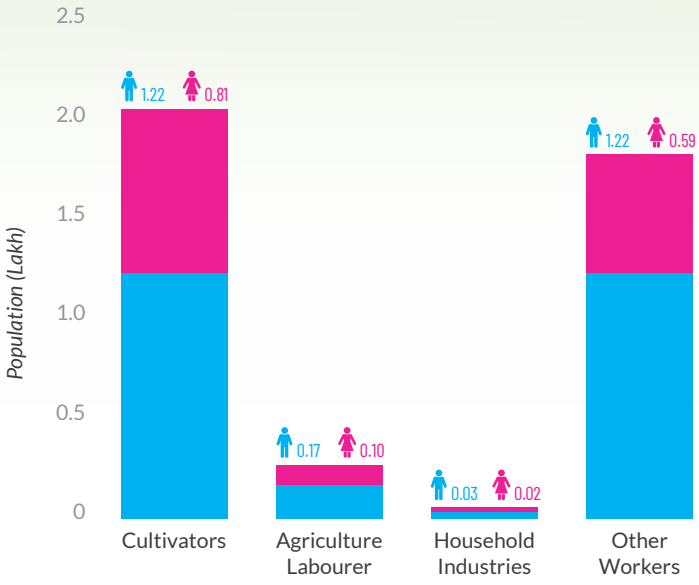

*(Census of India, 2011)*

## Working & Non Working Population

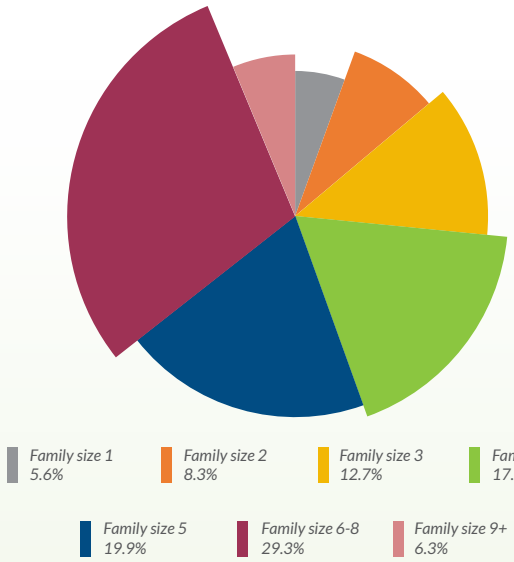



(Census of India, 2011)

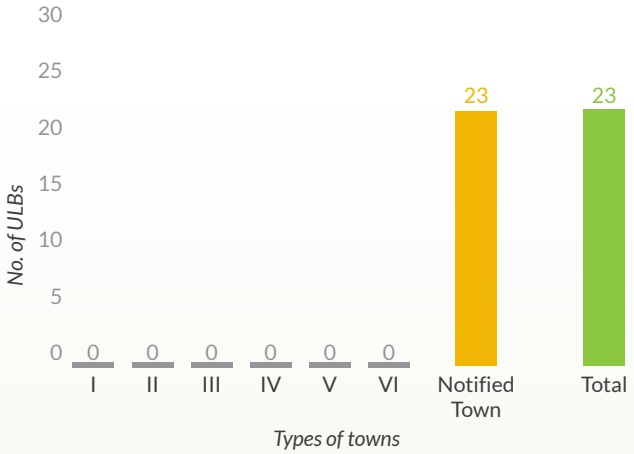
## Main Workers




## Family Size




## Class of Towns




(Census of India, 2011)

## Urban Local Body (ULB)

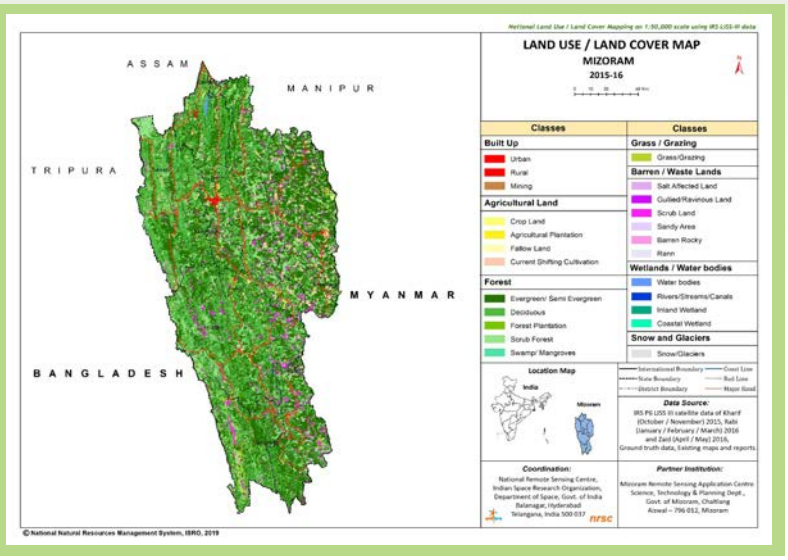
| Municipal Corporations | | | |
|---|---|---|---|
| Number | 1 | Area (sq.km.) | 129.9 |
| Population (Lakh) | 2.9 | Population Density (persons/sq/km.) | 2232.5 |

| Municipal Councils | | | |
|---|---|---|---|
| Number | 00 | Area (sq.km.) | 00 |
| Population (Lakh) | 00 | Population Density (persons/sq/km.) | 00 |

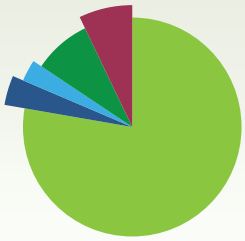
| Nagar Panchayats | | | |
|---|---|---|---|
| Number | 00 | Area (sq.km.) | 00 |
| Population (Lakh) | 00 | Population Density (persons/sq/km.) | 00 |

*(Indian Council for Research on International Economic Relations, 2019)[3]*

# Land use




*(ISRO, 2019)*



77.7% Forests

7.1% Net sown area

8.5% Total Fallow Land

3.7% Not under Cultivable Land

2.9% Uncultivable land excluding Fallow Land

| | |
|---|---|
| Geographical Area (Thousand Hectares) | 2,108 |
| Area for Land Utilisation Statistics (Thousand Hectares) | 2,039 |

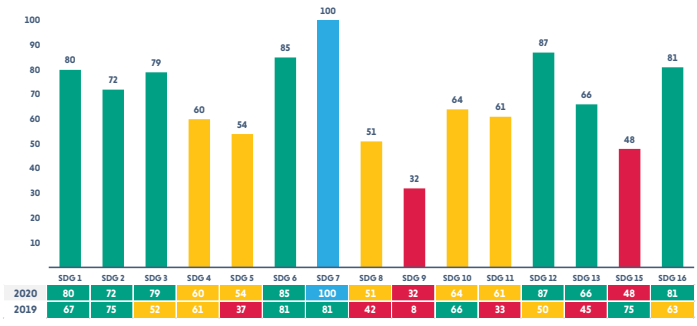
*(Ministry of Agriculture and Farmers Welfare, 2021)[1]*

# SDG Status

The SDG India Index and Dashboard is a crucial tool in India's SDG monitoring efforts. Designed and developed by NITI Aayog, the Index measures the progress at the national and sub-national levels towards meeting the Global Goals and targets


## Performance by Indicator

RANK: 13 Score: 68



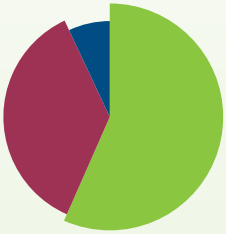

*(NITI Aayog and United Nations, 2021) [7]*

# Access to Water Supply

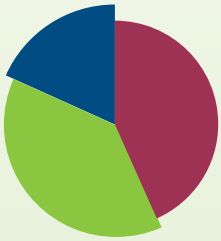
Indicators: ↑Highest ↓Lowest

Aizawl is having 72% piped water supply as per baseline in 2015 and AMRUT mission target is 100% piped water supply.

## State Scenario



*Piped Water Supply 68.33 %* *Groundwater 23.35%* *Surface Water Body 8.43%*



*Near Premises 38.55%* *Within Premises 43.28%* *Away 18.18%*

## Source of Water

| Piped Water Supply | Groundwater | Surface Water Body |
|---|---|---|
| ↑ Lunglei 81.8% | ↑ Lawngtlai, Saiha 90.4% | ↑ Mamit 21.4% |
| ↓ Lawngtlai 34.8% | ↓ Aizawl, Kolasib 22.2% | ↓ Saiha 3.1% |

*Note - Piped Water connection includes supply of water sourced from groundwater i.e. Well, handpump, tubewell, borewell and spring, and surface water bodies i.e. River, canal, pond and lake.*

## Proximity to the Water Source

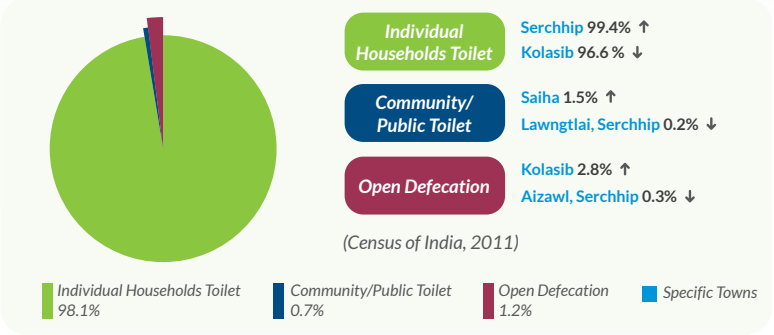
| Near Premises | Within Premises | Away |
|---|---|---|
| ↑ Champhai 63.6% | ↑ Lunglei 65.9% | ↑ Lawngtlai 55.7% |
| ↓ Lawngtlai 26% | ↓ Lawngtlai 18.2% | ↓ Lunglei 6.9% |

*(Census of India, 2011)*

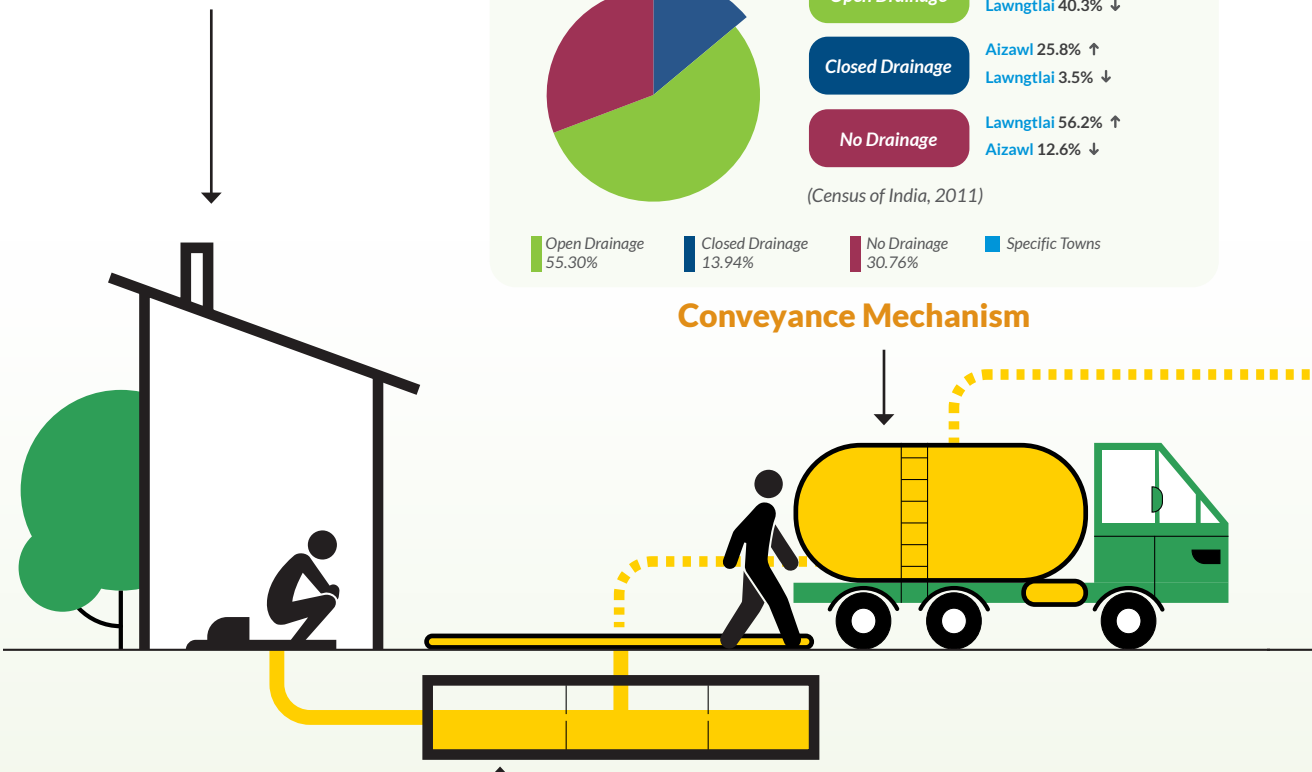
*Specific Cities*

# Access to Sanitation

The state has secured 22nd rank in Swachh Survekshan 2021.
Total ULB/Cities – 28
Individual Household Toilet Target: 16,441 | Target Achieved: 72.25%
Community/Public Toilet Target: 491 | Target Achieved: 270%
**ODF: 23 ULBs | ODF+: 0 ULB**

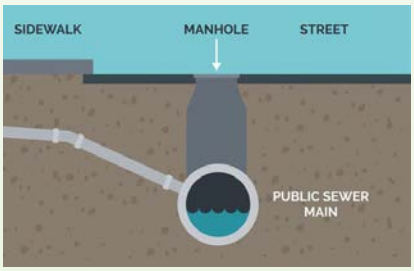



## Access to Toilet



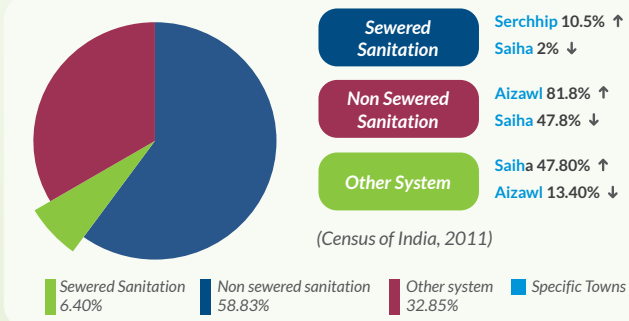
## Conveyance Mechanism




*Note- Drainage refers to type of drainage connectivity for waste water outlet connected to sewered or non-sewered sanitation system. Closed drainage refers to sewered sanitation system. Open drainage refers to non-sewered sanitation and other systems connected to open drains. No drainage refers to having onsite disposal mechanism*

## Containment*

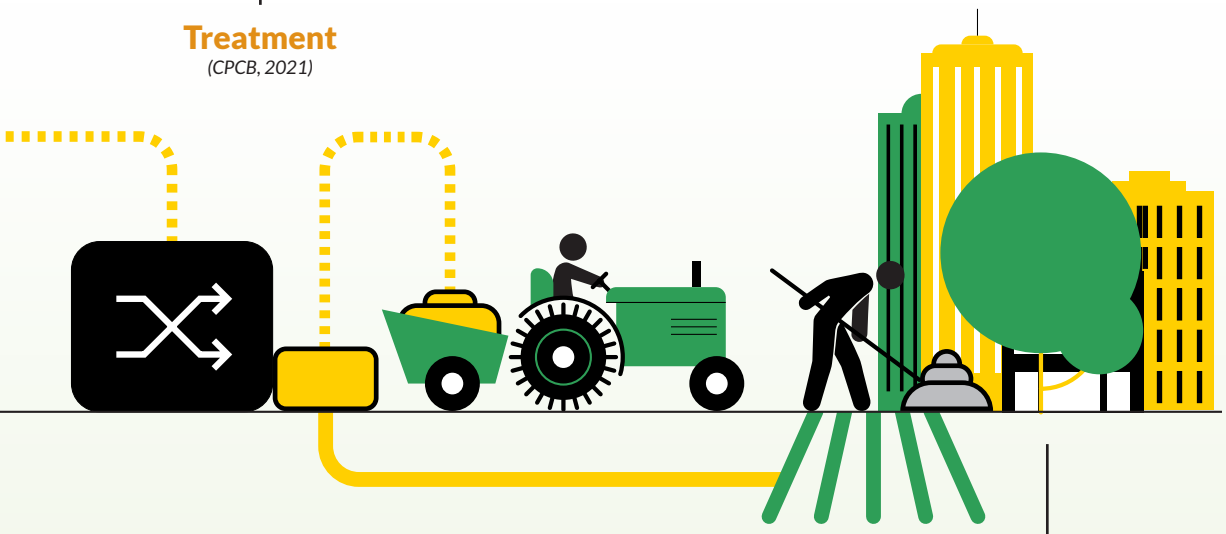



**Attributing percentage of Individual Household Toilet*

*Total Treatment capacity:*
**10 MLD**
*Installed STP capacity:*
**10 MLD**

*Total Sewage generation*
**103 MLD**

## Treatment
*(CPCB, 2021)*



## Enduse/Disposal

No Reuse and discharge in open

# Solid Waste Management

**No Garbage Free City**









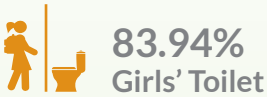
0.45% Collected Waste gets processed scientifically.




*(SBM Urban,2022)*

# School Sanitation

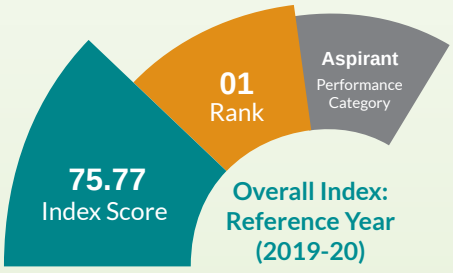


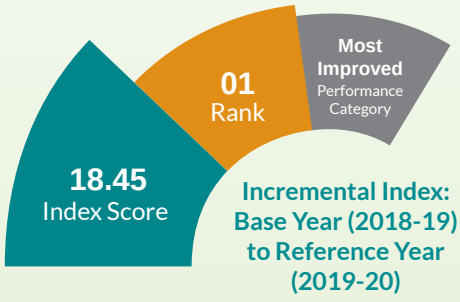



*Source: (National Institute of Educational Planning & Administration, 2018) [8]*

*Note: Institutions include primary, upper primary, secondary and senior secondary schools.*

# Health and Hygiene




*(Ministry of Health and Family Welfare, 2021)[9]*

*Note: Health Index: A weighted composite index based on 24 indicators under the domain of health outcomes, governance and information and key inputs and processes. It is a tool which measures health which changes over time for different geographic areas.*

# Status of National Missions and Programs

| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Aizawl | Aizawl |

## SBM Budget Allocation

| Funds Released | | Funds Utilised |
|---|---|---|
| 22.09 crores | SBM 1.0 | 89% |

| Funds Released | | Funds Utilised |
|---|---|---|
| NIL | SBM 2.0 | NIL |

*(Ministry of Housing & Urban Affairs, 2021) [4]*

## Total AMRUT 1.0 Budget: INR 140.25 crore (2015 – 2020)

## Total AMRUT 2.0 Budget: INR 142 crore (2021 – 2026)

| Water Supply | Sewerage and Septage Management | Drainage |
|---|---|---|
| 01 Project | 01 Project | 01 Project |
| 36.85% Budget | 9.79% Budget | 40.78% Budget |

*(State Annual Action Plan (SAAP), Mizoram 2017-20)[5]*

## 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)


*(15th Finance Commission Report for 2021-26)[6]*

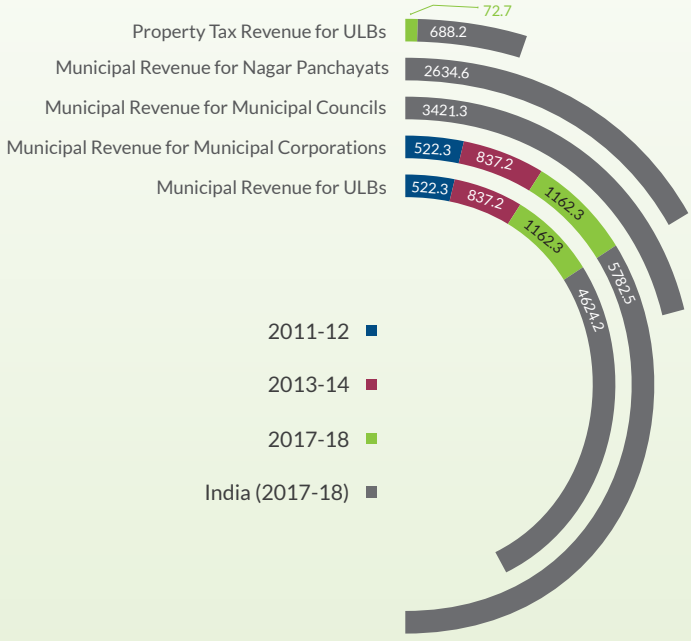
**Grants to local bodies** – Health grants, Rural local bodies, and Urban local bodies.

**Sector specific grants** – Health, PMGSY Roads, Statistics, Judiciary, Higher Education, Agriculture.

**State specific grants** – Social needs, administrative governance and infrastructure, water and sanitation, preservation of culture and historical monuments, high-cost physical infrastructure, and tourism.

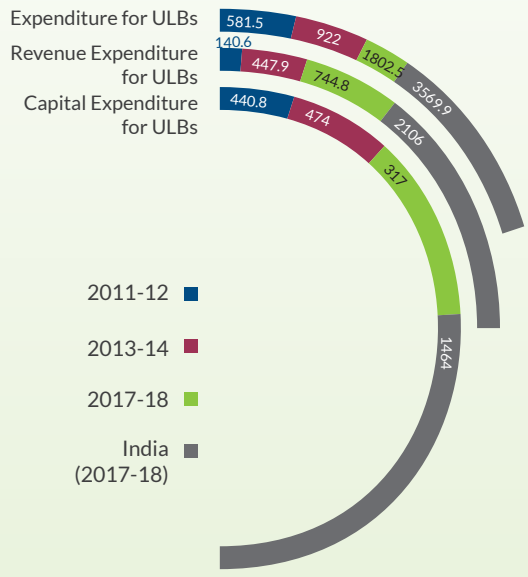
# State Municipal Finances

## Municipal Revenue [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

## Municipal Expenditures [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

# Bibliography


[1] *DES, "Land Use Statistics at a glance 2009-10 to 2018-19," p. 154, 2021, [Online]. Available: https://eands.dacnet.nic.in/LUS_2017-18/Land Use Statistics at a Glance 2008-09 to 2017-18.pdf*

[2] *Government of India, "Population Projections for India and States 2011 - 2036-Report of The Technical Group On Population Projections, July,2020," pp. 26–32, 2020, [Online]. Available: https://main.mohfw.gov.in/sites/default/files/Population Projection Report 2011-2036 - upload_compressed_0.pdf*

[3] *O. Mathur, D. Roy, A. Khare, and S. Mangla, "State of Municipal Finances in India," no. March, 2019.*

[4] *Ministry of Drinking Water & Sanitation, "Swachh Bharat Mission Objectives," no. June, p. 0, 2010, [Online]. Available: http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf*

[5] *AMRUT, "State Annual Action Plan (SAAP) 2017-20," 2017.*

[6] *India, "Report of the 15 th Finance Commission for 2021-26," no. 011, 2021, [Online]. Available: https://prsindia.org/files/policy/policy_committee_reports/Report Summary_15th FC_2021-26.pdf*

[7] *GoI, "SDG India Index & Dashboard 2020-21 report," Partnerships Decad. Action, p. 348, 2021, [Online]. Available: https://niti.gov.in/writereaddata/files/SDG_3.0_Final_04.03.2021_Web_Spreads.pdf*

[8] *Ministry of Human Resource Development, "Educational Statistics at a Glance 2018," Educ. Stat. a Glance, pp. 1–127, 2018, [Online]. Available: https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf*

[9] *NITI Aayog, "Health States Progressive India: Health Index Round IV 2019-20," Minist. Heal. Fam. Welf., no. 4, 2021, [Online]. Available: http://indiabudget.nic.in/ub2013-14/eb/sbe47.pdf*

# Nagaland

| | |
|---|---|
| Capital | Kohima |
| Districts | 16 |
| Area | 16,579 km$^2$ |
| Total Population (2011) | 19,80,602 |
| Density | 119.3 persons/km$^2$ |
| Elevation | 1,333.76 m above MSL |

*Source: Various*


## Geography

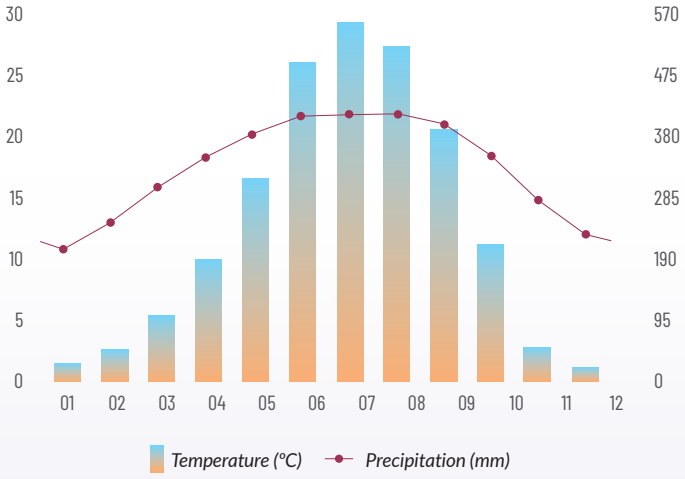
Nagaland is a state in north east India bordered by Arunachal Pradesh to the north, Assam to the west, Manipur to the south and Sagaing region of Myanmar to the east. Nagaland is a mountainous state and lies between 25° 40' 12" N and 94° 7' 12" E.

## Climate

Nagaland has a largely monsoon climate with high humidity levels. Summer is the shortest season in the state, lasting for only a few months.

| | |
|---|---|
| Yearly average temperature | 25.05°C |
| Annual precipitation | 171.22 mm |
| Rainy days | 207.55 rainy days |

*Source: Various*

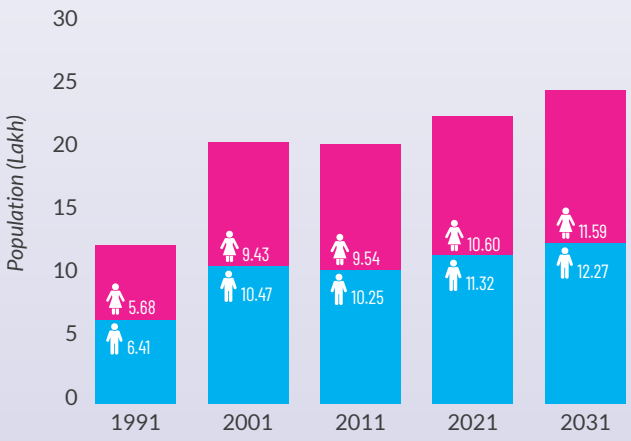



## Demography

As per census 2011, 28.86 % of the total population resides in urban areas and 71.14 % resides in rural areas.

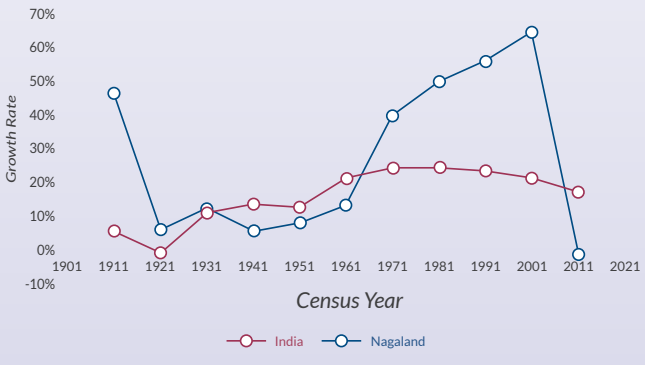
### Sex Ratio


### Population



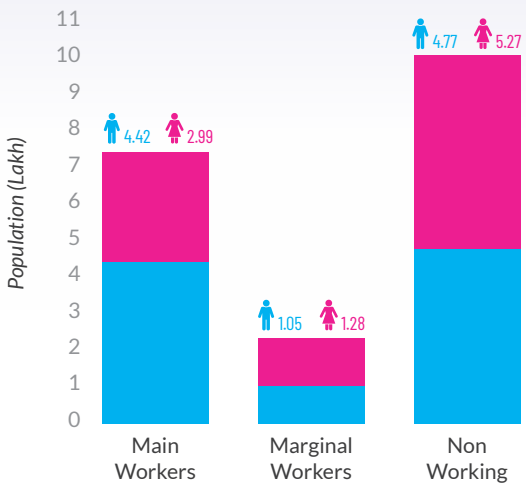

*(Ministry of Health & Family Welfare, 2020)[2]*

### Decadal Variation



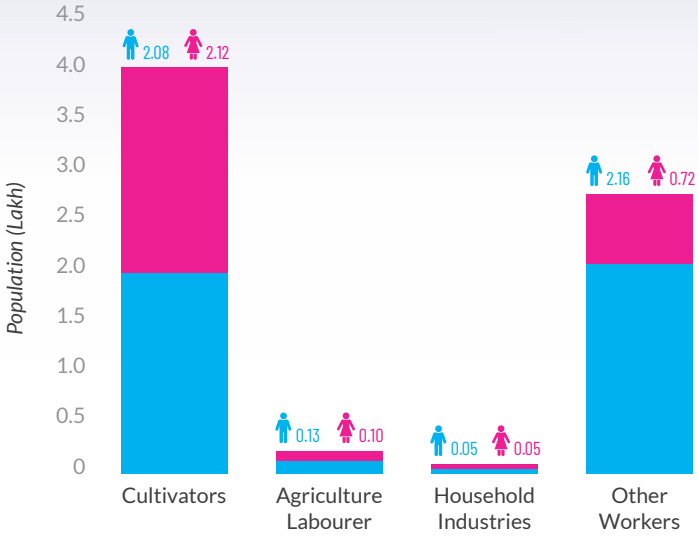

*(Census of India, 2011)*

## Working & Non Working Population

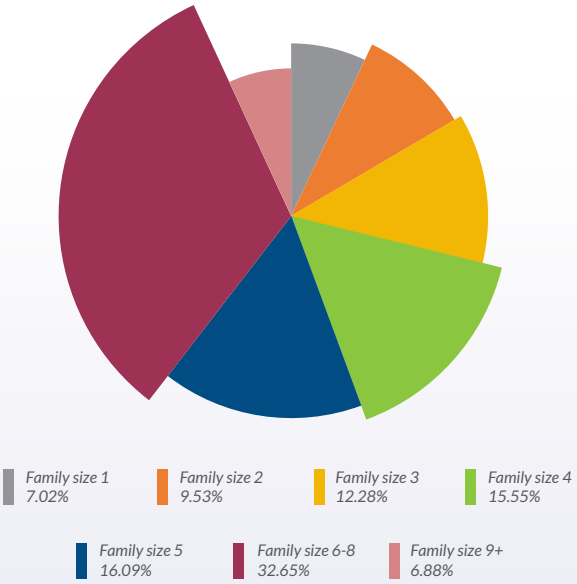



(Census of India, 2011)

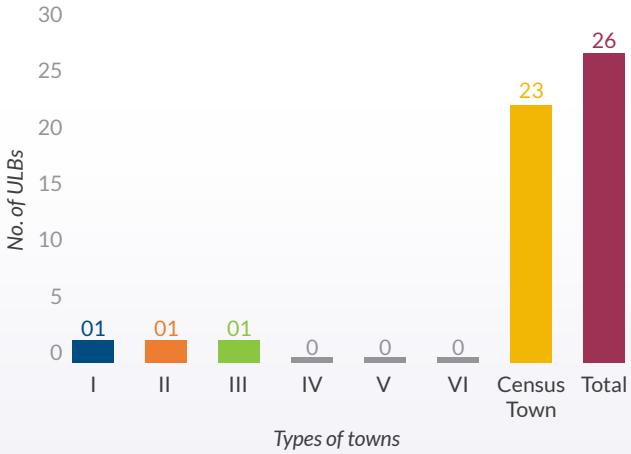
## Main Workers




## Family Size




## Class of Towns




(Census of India, 2011)

## Urban Local Body (ULB)

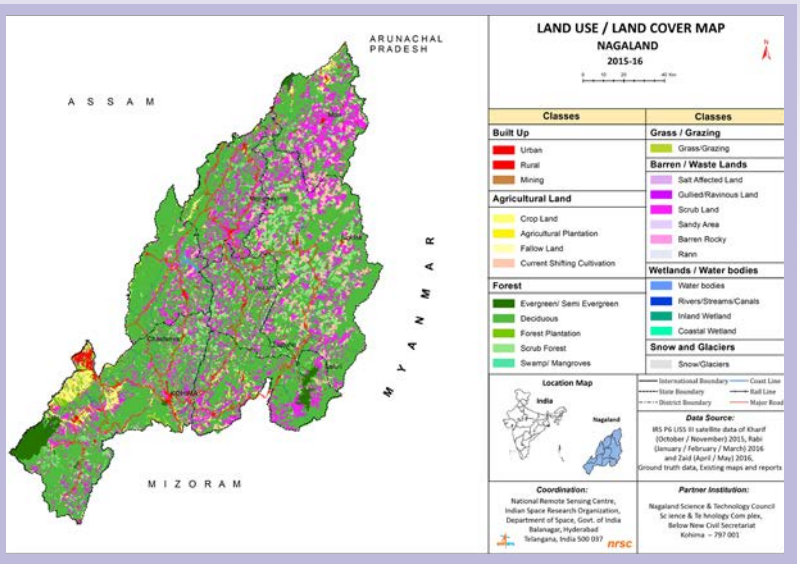
| Municipal Corporations | | | |
|---|---|---|---|
| Number | 00 | Area (sq.km.) | 00 |
| Population (Lakh) | 00 | Population Density (persons/sq/km.) | 00 |

| Municipal Councils | | | |
|---|---|---|---|
| Number | 03 | Area (sq.km.) | 42.13 |
| Population (Lakh) | 2.6 | Population Density (persons/sq/km.) | 6,171.4 |

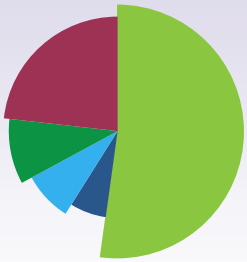
| Nagar Panchayats | | | |
|---|---|---|---|
| Number | 29 | Area (sq.km.) | 129.65 |
| Population (Lakh) | 3.3 | Population Density (persons/sq/km.) | 2,545.3 |

*(Indian Council for Research on International Economic Relations, 2019)[3]*

# Land use




*(ISRO, 2019)*



52% Forests

23% Net sown area

10% Total Fallow Land

7% Not under Cultivable Land

8% Uncultivable land excluding Fallow Land

| | |
|---|---|
| Geographical Area (Thousand Hectares) | 1,658 |
| (Thousand Hectares) | 1,653 |

*(Ministry of Agriculture and Farmers Welfare, 2021)[1]*

# SDG Status

The SDG India Index and Dashboard is a crucial tool in India's SDG monitoring efforts. Designed and developed by NITI Aayog, the Index measures the progress at the national and sub-national levels towards meeting the Global Goals and targets

## Performance by Indicator

RANK: 21 Score: 61

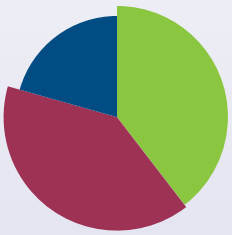

*(NITI Aayog and United Nations, 2021) [7]*

# Access to Water Supply

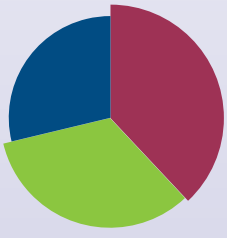
Indicators: ↑Highest ↓Lowest

Dimapur is having 32% and Kohima is having 20.6% piped water supply as per baseline in 2015 and AMRUT mission target is 100% piped water supply.

## State Scenario



*Piped Water Supply 39.55%* *Groundwater 39.81%* *Surface Water Body 20.61%*



*Near Premises 33.25%* *Within Premises 38.01%* *Away 28.75%*

## Source of Water

| Piped Water Supply | Groundwater | Surface Water Body |
|---|---|---|
| ↑ Wokha 72.5 % | ↑ Dimapur 80.8% | ↑ Mokokchung 81.3% |
| ↓ Mokokchung 0.2 % | ↓ Mokokchung 18.4 % | ↓ Dimapur, Kiphire 3.1% |

*Note - Piped Water connection includes supply of water sourced from groundwater i.e. Well, handpump, tubewell, borewell and spring, and surface water bodies i.e. River, canal, pond and lake.*

## Proximity to the Water Source

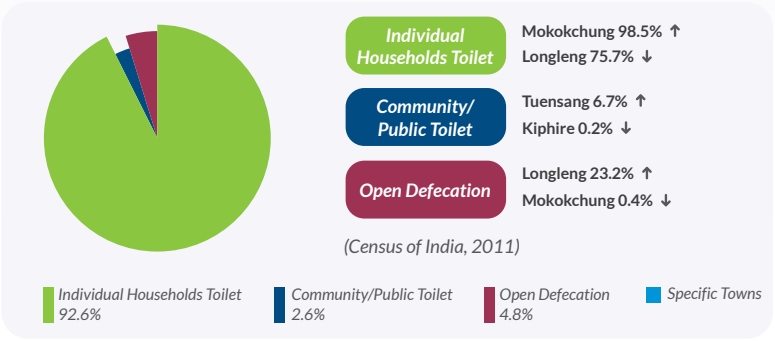
| Near Premises | Within Premises | Away |
|---|---|---|
| ↑ Mokokchung 44.5% | ↑ Dimapur 80.4% | ↑ Longleng 58.4% |
| ↓ Dimapur 14.5% | ↓ Longleng 0.1% | ↓ Dimapur 5.1 % |

*(Census of India, 2011)*

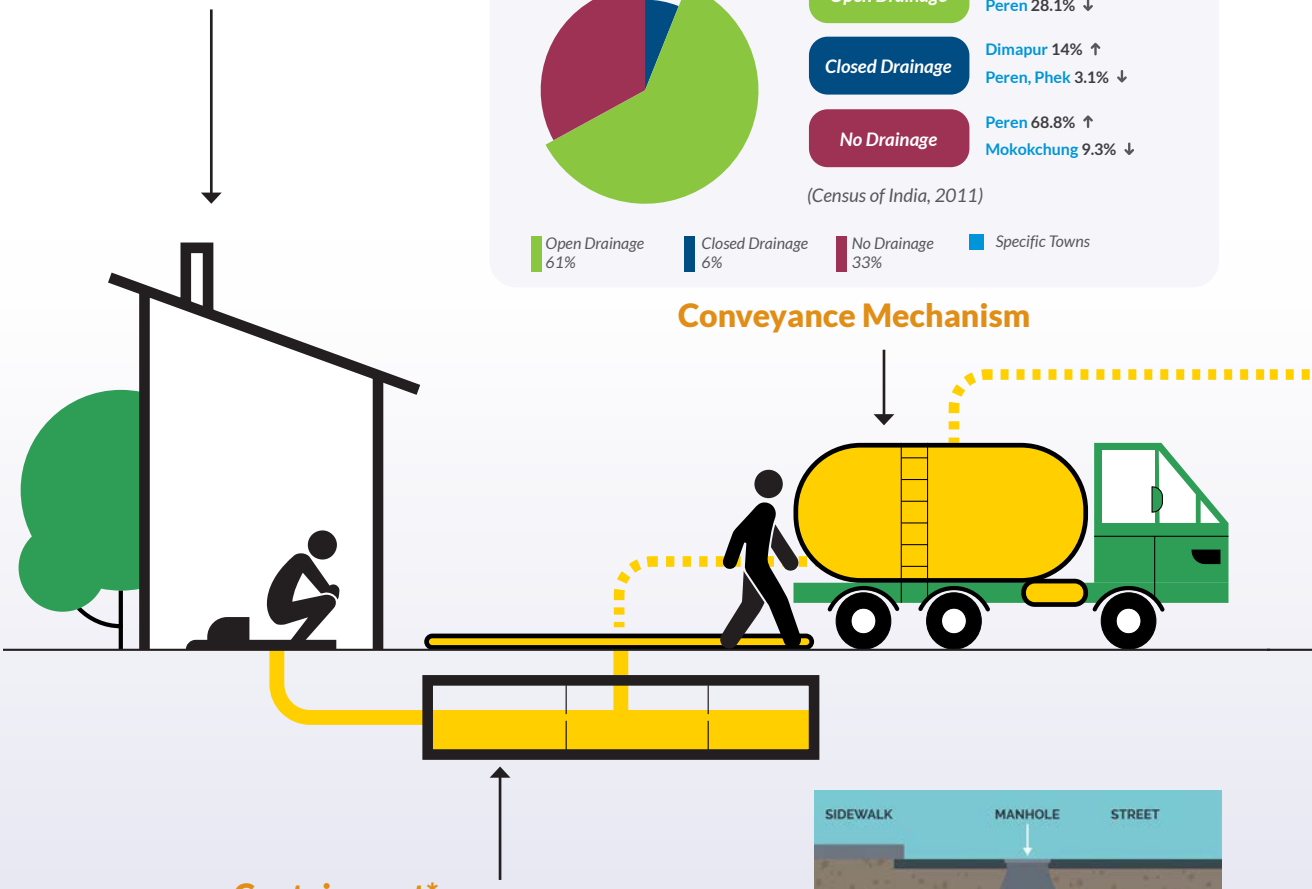
*Specific Cities*

# Access to Sanitation

The state has secured 18th rank in Swachh Survekshan 2021.
Total ULB/Cities – 39
Individual Household Toilet Target: 23,427 | Target Achieved: 84.72%
Community/Public Toilet Target: 478 | Target Achieved: 49.8%
**ODF: 19 ULBs | ODF+: 0 ULB**



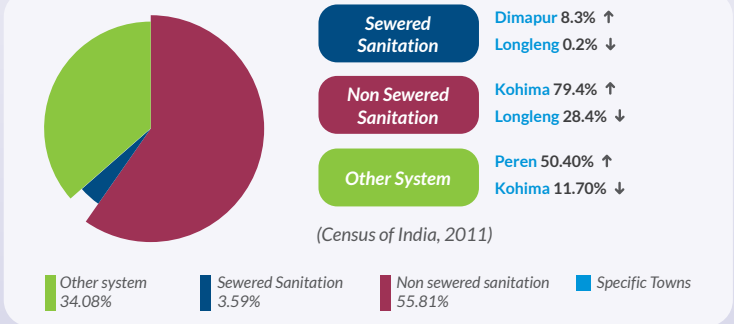

## Access to Toilet



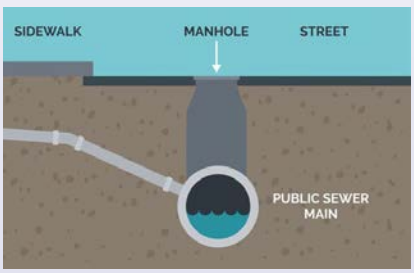
## Conveyance Mechanism




## Containment*




*Attributing percentage of Individual Household Toilet



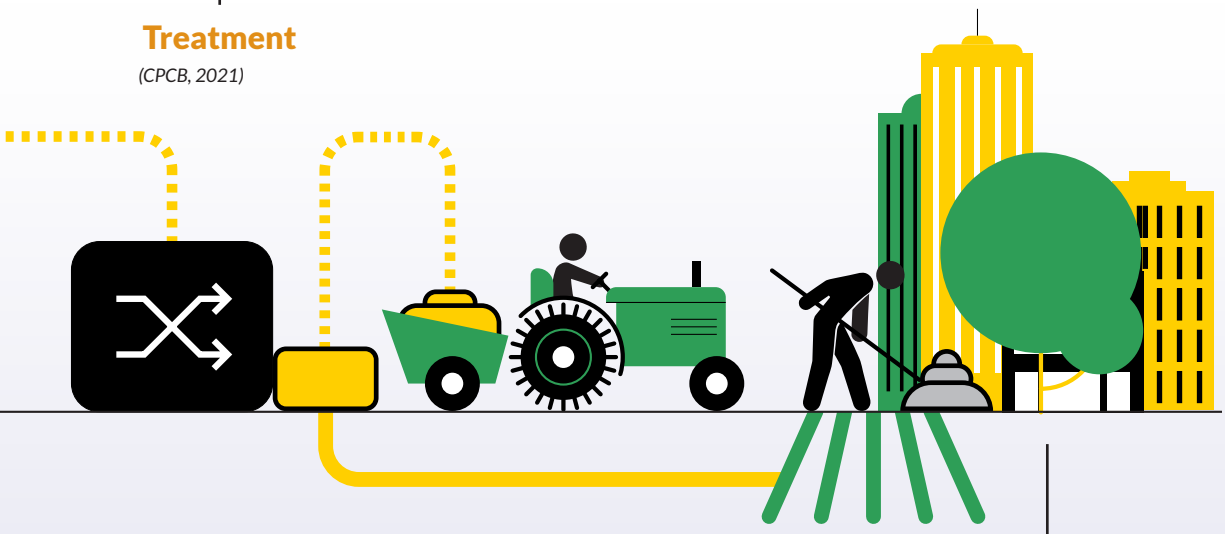

*Note- Drainage refers to type of drainage connectivity for waste water outlet connected to sewered or non-sewered sanitation system. Closed drainage refers to sewered sanitation system. Open drainage refers to non-sewered sanitation and other systems connected to open drains. No drainage refers to having onsite disposal mechanism*

*FSTP Capacity*
**90 KLD**

*Total Sewage generation*
**135 MLD**

## Treatment

*(CPCB, 2021)*



## Enduse/Disposal

No Reuse and discharge in open

## Solid Waste Management

**No Garbage Free City**


*(SBM Urban,2022)*

## School Sanitation

2,826 Institutions

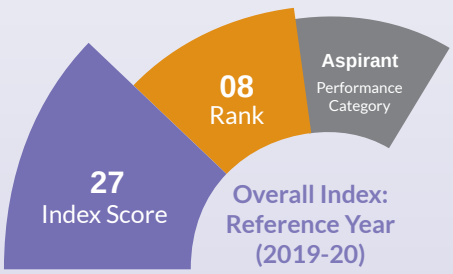
82.06% Drinking Water Facility

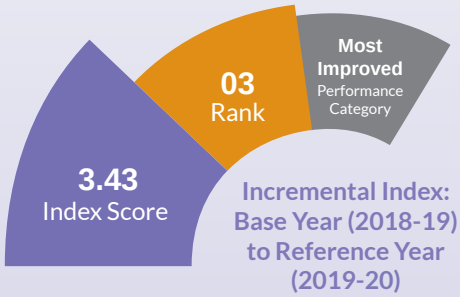
99.89% Girls' Toilet

*Source: (National Institute of Educational Planning & Administration, 2018) [8]*

*Note: Institutions include primary, upper primary, secondary and senior secondary schools.*

## Health and Hygiene




*(Ministry of Health and Family Welfare, 2021)[9]*

*Note: Health Index: A weighted composite index based on 24 indicators under the domain of health outcomes, governance and information and key inputs and processes. It is a tool which measures health which changes over time for different geographic areas.*

# Status of National Missions and Programs

| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Dimapur, Kohima | Kohima |

## SBM Budget Allocation

| Funds Released | | Funds Utilised |
|---|---|---|
| 31.80 crores | SBM 1.0 | 100% |

| Funds Released | | Funds Utilised |
|---|---|---|
| 6.27 crores | SBM 2.0 | NIL |

*(Ministry of Housing & Urban Affairs, 2021) [4]*

## Total AMRUT 1.0 Budget: INR 120.22 crore (2015 – 2020)

### Water Supply

NIL Project

6.65% Budget

### Sewerage and Septage Management

NIL Project

6.65% Budget

### Drainage

NIL Project

66.32% Budget

## Total AMRUT 2.0 Budget: INR 175 crore (2021 – 2026)

*(State Annual Action Plan (SAAP), Nagaland 2017-20)[5]*

## 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)


*(15th Finance Commission Report for 2021-26)[6]*

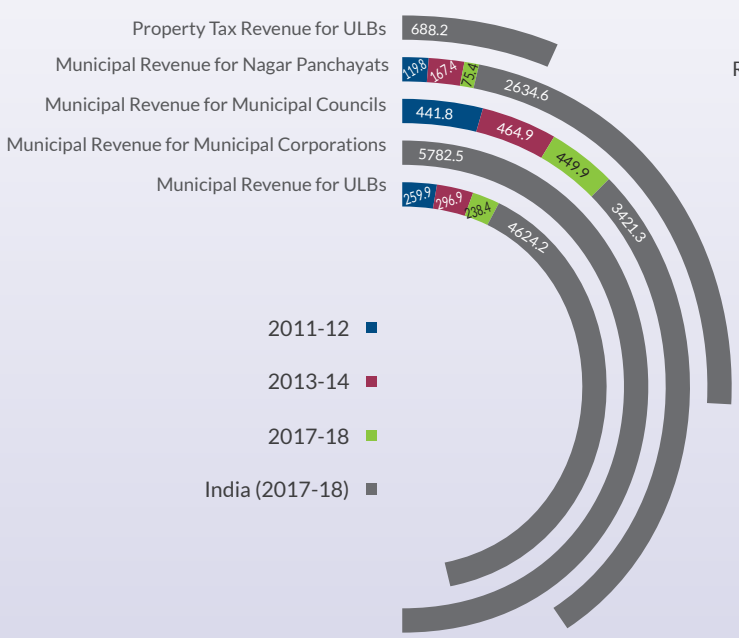
**Grants to local bodies** – Health grants, Rural local bodies, and Urban local bodies.

**Sector specific grants** – Health, PMGSY Roads, Statistics, Judiciary, Higher Education, Agriculture.

**State specific grants** – Social needs, administrative governance and infrastructure, water and sanitation, preservation of culture and historical monuments, high-cost physical infrastructure, and tourism.

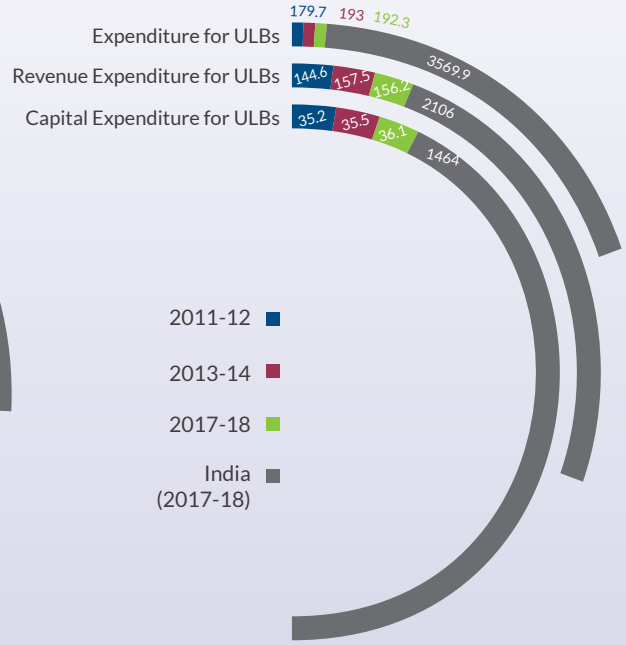
# State Municipal Finances

## Municipal Revenue [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

## Municipal Expenditures [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

# Bibliography


[1] *DES, "Land Use Statistics at a glance 2009-10 to 2018-19," p. 154, 2021, [Online]. Available: https://eands.dacnet.nic.in/LUS_2017-18/Land Use Statistics at a Glance 2008-09 to 2017-18.pdf*

[2] *Government of India, "Population Projections for India and States 2011 - 2036-Report of The Technical Group On Population Projections, July,2020," pp. 26–32, 2020, [Online]. Available: https://main.mohfw.gov.in/sites/default/files/Population Projection Report 2011-2036 - upload_compressed_0.pdf*

[3] *O. Mathur, D. Roy, A. Khare, and S. Mangla, "State of Municipal Finances in India," no. March, 2019.*

[4] *Ministry of Drinking Water & Sanitation, "Swachh Bharat Mission Objectives," no. June, p. 0, 2010, [Online]. Available: http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf*

[5] *AMRUT, "State Annual Action Plan (SAAP) 2017-20," 2017.*

[6] *India, "Report of the 15 th Finance Commission for 2021-26," no. 011, 2021, [Online]. Available: https://prsindia.org/files/policy/policy_committee_reports/Report Summary_15th FC_2021-26.pdf*

[7] *GoI, "SDG India Index & Dashboard 2020-21 report," Partnerships Decad. Action, p. 348, 2021, [Online]. Available: https://niti.gov.in/writereaddata/files/SDG_3.0_Final_04.03.2021_Web_Spreads.pdf*

[8] *Ministry of Human Resource Development, "Educational Statistics at a Glance 2018," Educ. Stat. a Glance, pp. 1–127, 2018, [Online]. Available: https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf*

[9] *NITI Aayog, "Health States Progressive India: Health Index Round IV 2019-20," Minist. Heal. Fam. Welf., no. 4, 2021, [Online]. Available: http://indiabudget.nic.in/ub2013-14/eb/sbe47.pdf*

# Sikkim

| | |
|---|---|
| Capital | Gangtok |
| Districts | 6 |
| Area | 7,096 km² |
| Total Population (2011) | 6,10,577 |
| Density | 86.05 persons/km² |
| Elevation | 837.93 m above MSL |

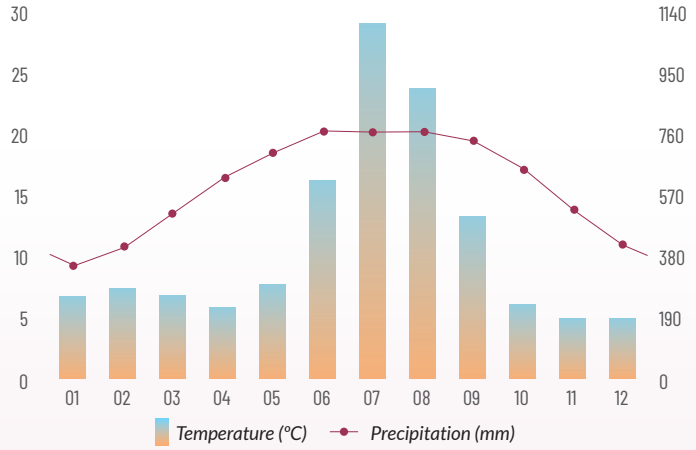

## Geography

Sikkim is a state in north east India bordered by Tibet Autonomous Region of China in the north and north east, Bhutan in the east, Province no. 1 of Nepal in the west and West Bengal in the South. Sikkim is also close to Siliguri Corridor, which borders Bangladesh. Sikkim is the second smallest states of India situated in the Eastern Himalayas at 27° 33' 0"N, 88° 30' 0" E.

## Climate

The state has five seasons: winter, summer, spring, autumn, and monsoon season. Sikkim's climate ranges from subtropical in the south to tundra in the north. Most of the inhabited regions of the state experience a temperate climate. .

| | |
|---|---|
| Yearly average temperature | 14.48°C |
| Precipitation | 105.45 mm |
| Rainy days | 168.44 rainy days |

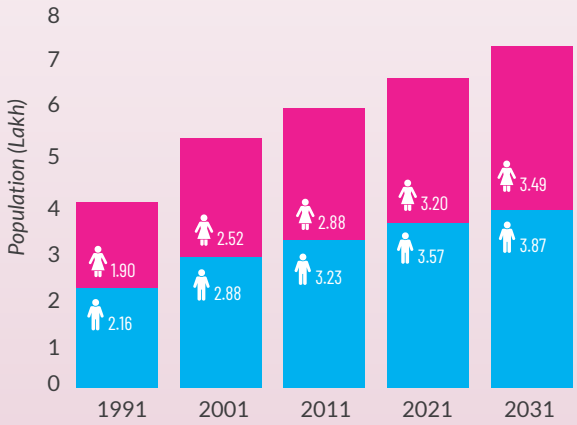



## Demography

As per census 2011, 25.15 % of the total population resides in urban areas and 74.85 % resides in rural areas.

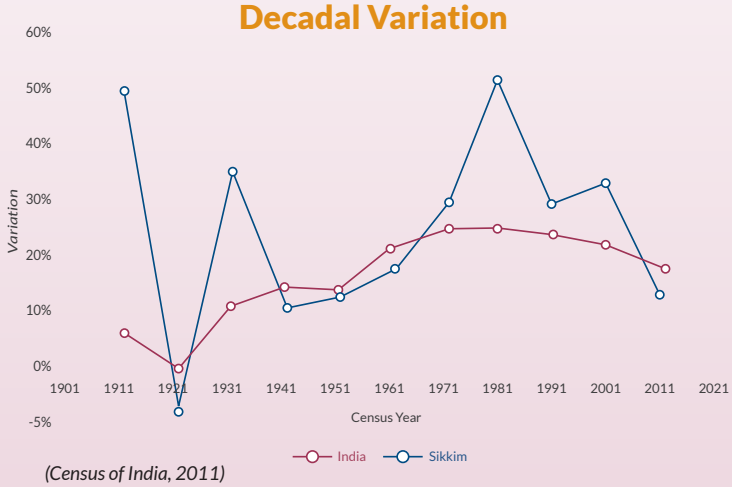
### Sex Ratio


### Population



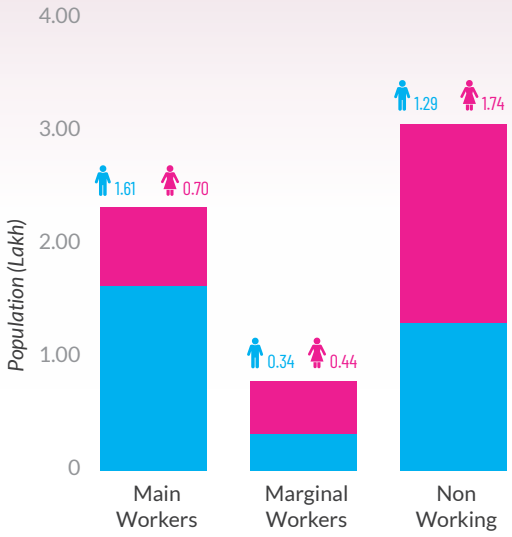

*(Ministry of Health & Family Welfare, 2020)[2]*

### Decadal Variation



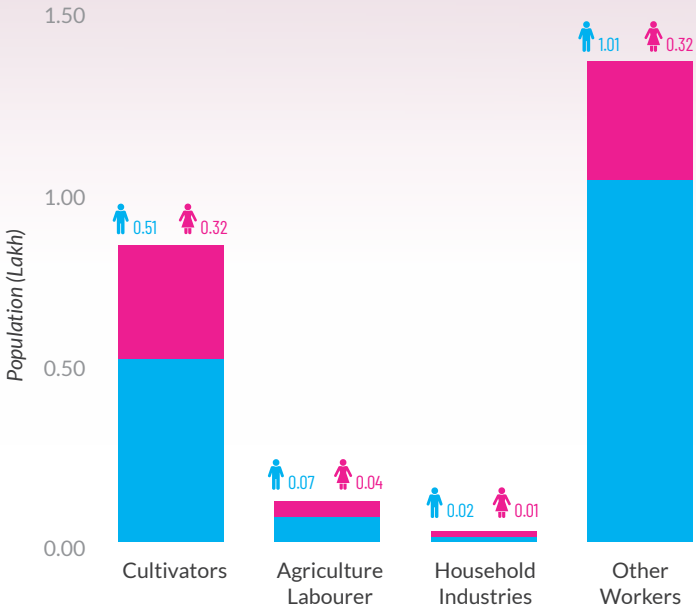

*(Census of India, 2011)*

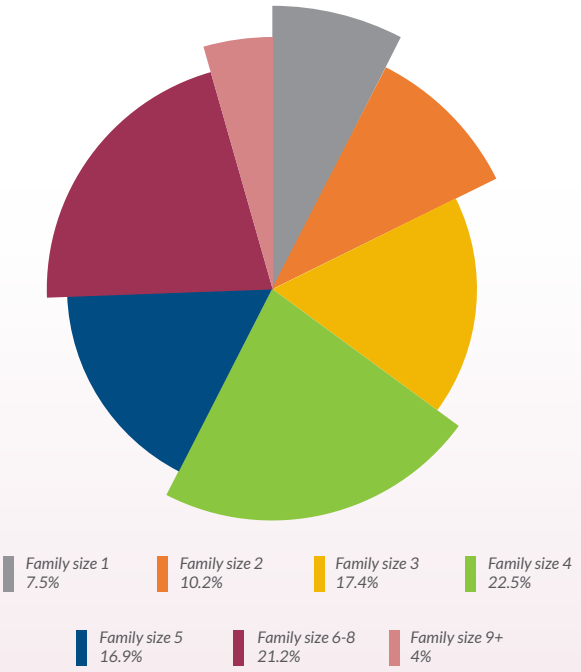
## Working & Non Working Population

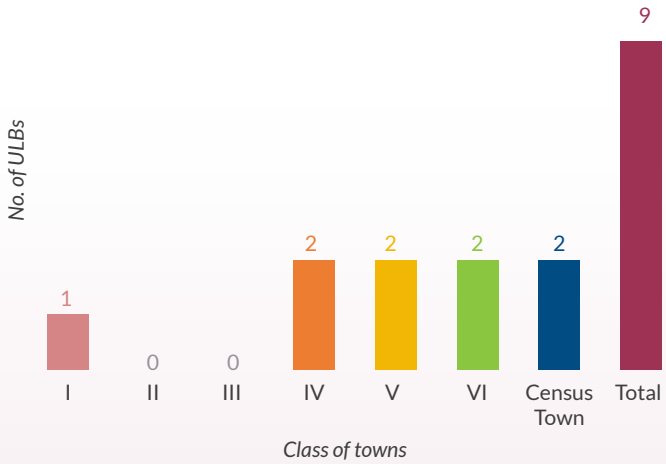



(Census of India, 2011)

## Main Workers




(Census of India, 2011)

Population range for each class of city

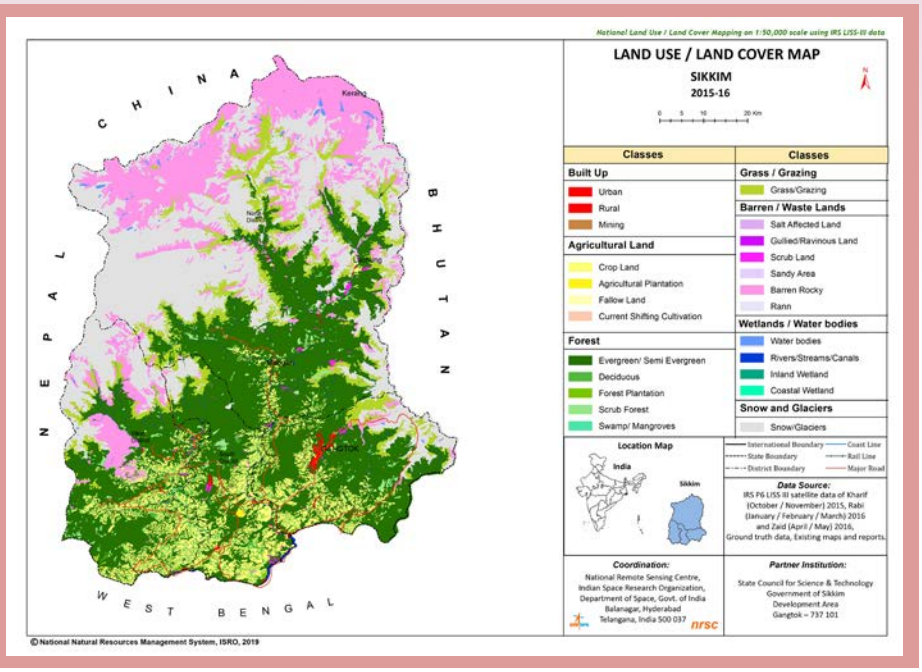
| Municipal Corporations | | | |
|---|---|---|---|
| Number | 1 | Area (sq.km.) | 19.29 |
| Population (Lakh) | 1 | Population Density (persons/sq/km.) | 5,184.0 |

| Municipal Councils | | | |
|---|---|---|---|
| Number | 3 | Area (sq.km.) | 12.9 |
| Population (Lakh) | 0.3 | Population Density (persons/sq/km.) | 2,325.6 |

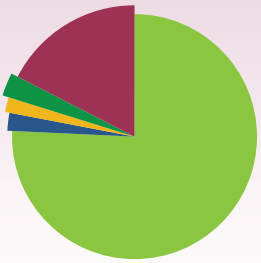
| Nagar Panchayats | | | |
|---|---|---|---|
| Number | 3 | Area (sq.km.) | 4.63 |
| Population (Lakh) | 0.2 | Population Density (persons/sq/km.) | 4,319.7 |

*(Indian Council for Research on International Economic Relations, 2019)[3]*

# Land use




*(ISRO, 2019)*



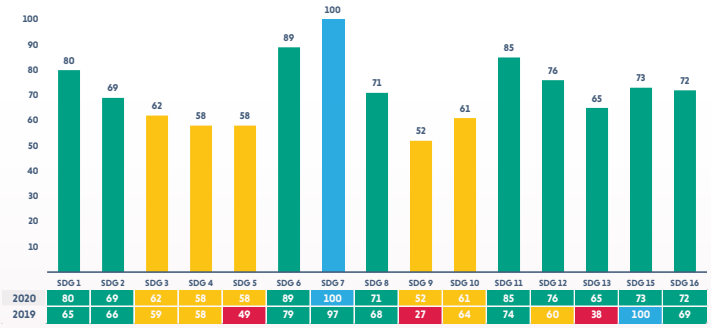
76% Forests
17% Net sown area
3% Total Fallow Land
2% Not under Cultivable Land
2% Uncultivable land excluding Fallow Land

| | |
|---|---|
| Geographical Area (Thousand Hectares) | 710 |
| Area for Land Utilisation Statistics (Thousand Hectares) | 441 |

*(Ministry of Agriculture and Farmers Welfare, 2021)[1]*

# SDG Status


## Performance by Indicator

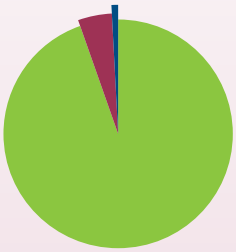



*(NITI Aayog and United Nations, 2021) [7]*

# Access to Water Supply

Indicators: ↑Highest ↓Lowest

Gangtok is having 75% piped water supply as per baseline in 2015 and AMRUT mission target is 100% piped water supply.

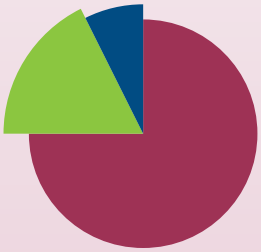


*Piped Water Supply 94.18%* *Groundwater 4.95%* *Surface Water Body 0.83%*

## Source of Water

| Piped Water Supply | Groundwater | Surface Water Body |
|---|---|---|
| ↑ South District 96.8% | ↑ East District 7.3% | ↑ West District 1.8% |
| ↓ East District 91.1% | ↓ West District 1.7% | ↓ East District 0.3% |

*Note - Piped Water connection includes supply of water sourced from groundwater i.e. Well, handpump, tubewell, borewell and spring, and surface water bodies i.e. River, canal, pond and lake.*



*Near Premises 17.63%* *Within Premises 75.03%* *Away 7.38%*

## Proximity to the Water Source

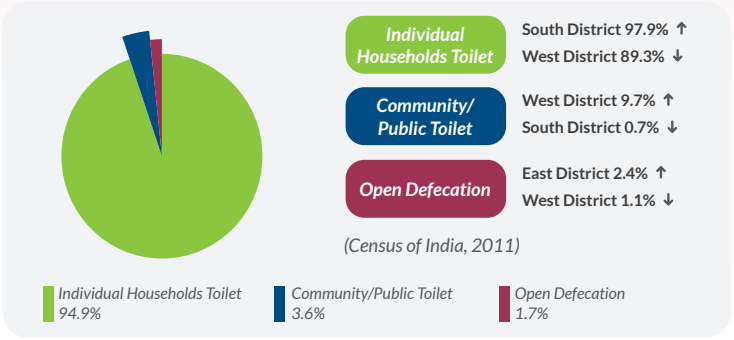
| Near Premises | Within Premises | Away |
|---|---|---|
| ↑ North District 19.6% | ↑ East District 81.1% | ↑ West District 17.4% |
| ↓ East District 14.9% | ↓ West District 66% | ↓ North District 3.4% |

*(Census of India, 2011)*

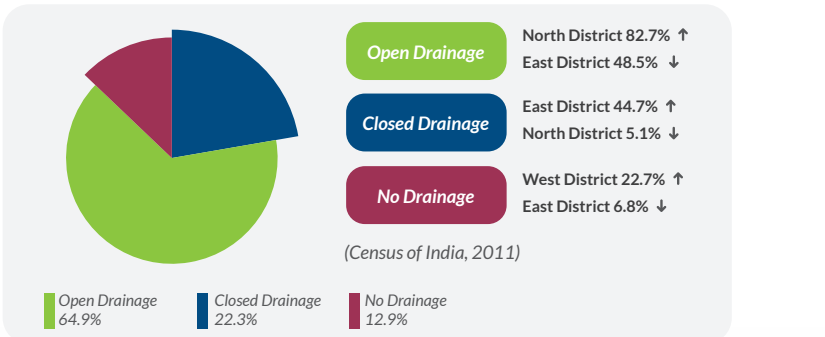
# Access to Sanitation

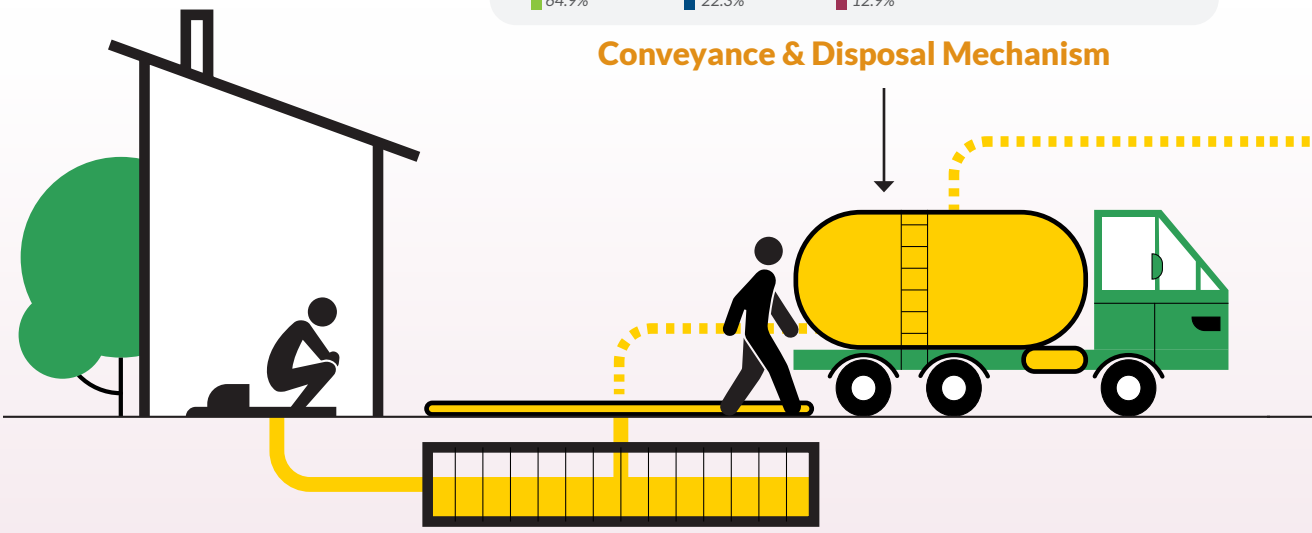
The state has sevured 24th rank in Swachh Survekshan 2021.
Total ULB/Cities – 7 | Individual Household Toilet Target: 1,587 | Target Achieved: 88.1%
Community/Public Toilet Target: 491 | Target Achieved: 188.73%
**ODF: 7 ULBs | ODF+: 3 ULBs**

## Access to Toilet

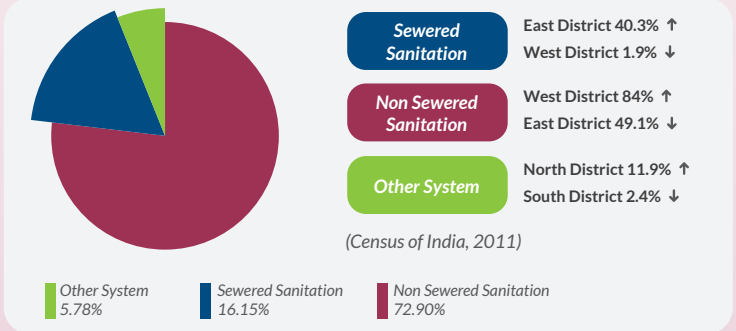



## Conveyance & Disposal Mechanism

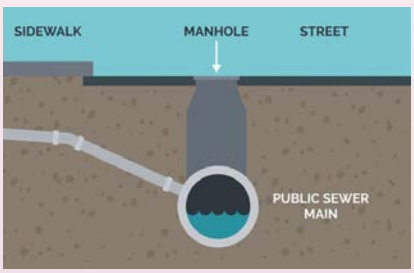


## Containment and Conveyance*




*The percentage is only showing percentage of Individual Household Toilet




*Note- Drainage refers to type of drainage connectivity for waste water outlet connected to sewered or non-sewered sanitation system. Closed drainage refers to sewered sanitation system. Open drainage refers to non-sewered sanitation and other systems connected to open drains. No drainage refers to having onsite disposal mechanism*

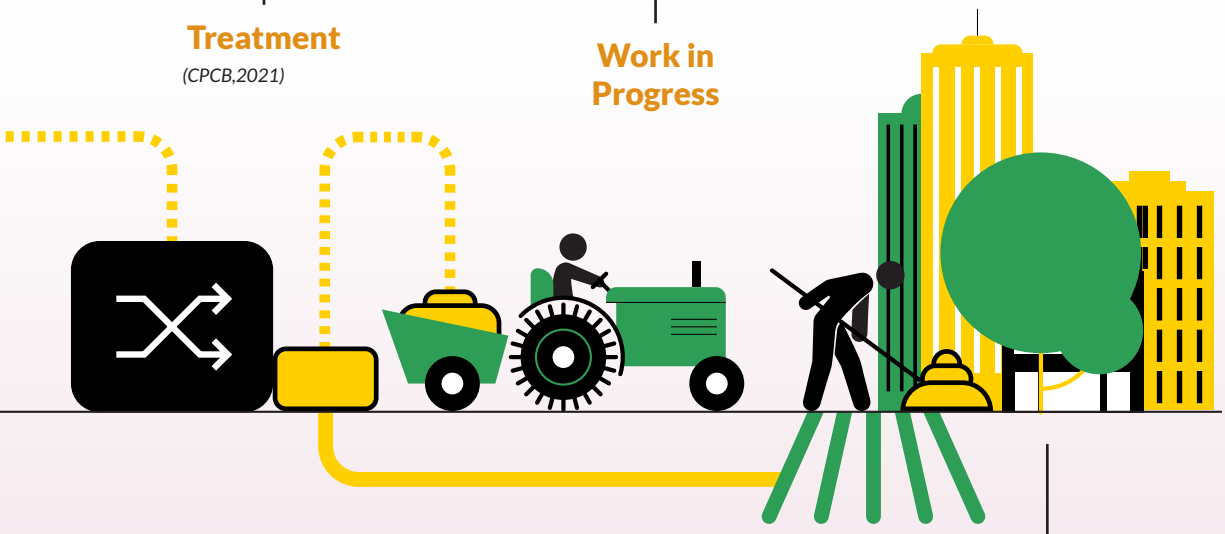
*Total Treatment capacity:*
**30 MLD**
*Installed STP capacity:*
**20 MLD**
*Operational STP Capacity:*
**18 MLD**

*Total Sewage generation*
**52 MLD**

*Proposed STP capacity*
**10 MLD**

**Treatment**
*(CPCB,2021)*

**Work in Progress**

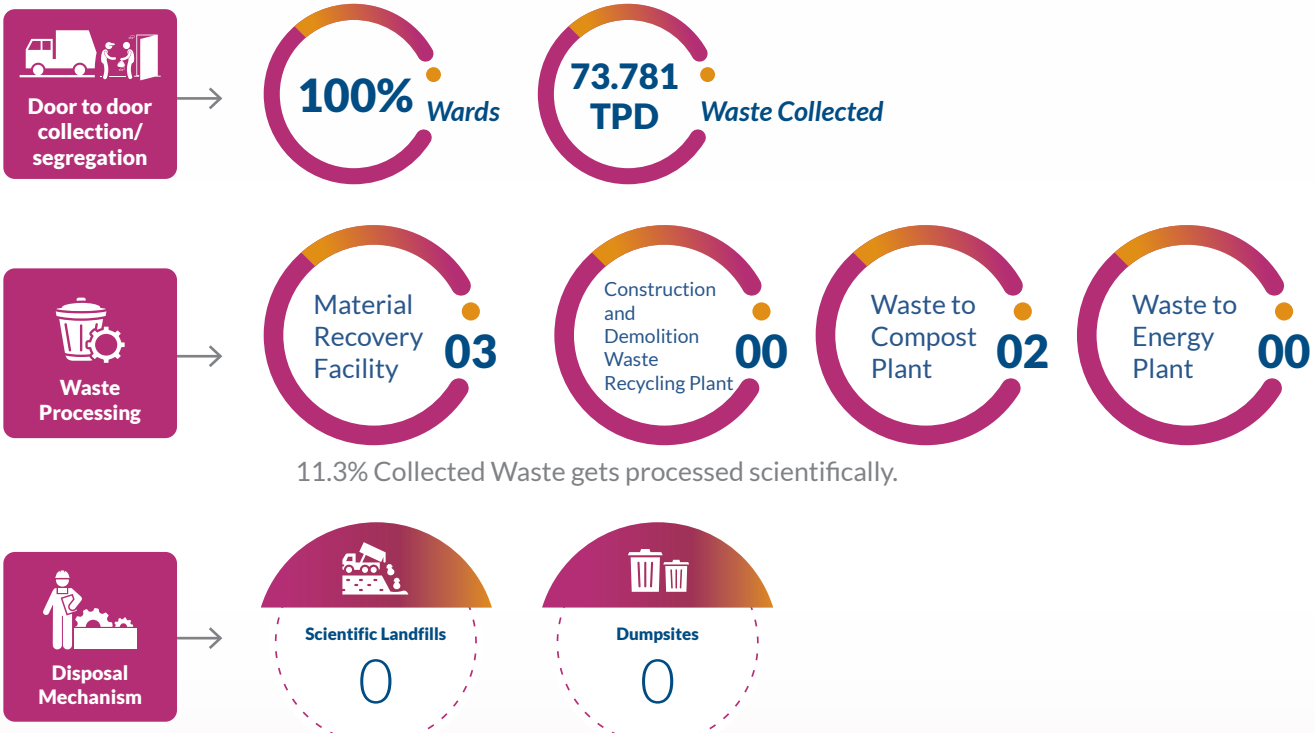


**Reuse/Disposal**

**Surface Water Discharge: 100%**

## Solid Waste Management

**No Garbage Free City**




*(SBM Urban,2022)*

## School Sanitation

1,279 Institutions

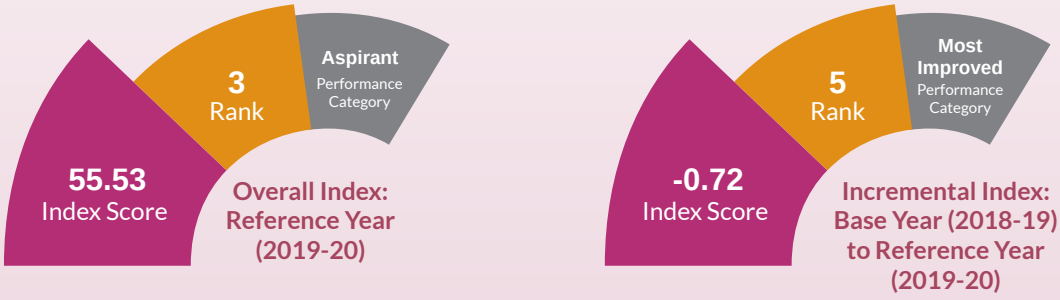
98.51% Drinking Water Facility

99.83% Girls' Toilet

*Source: (National Institute of Educational Planning & Administration, 2018) [8]*

*Note: Institutions include primary, upper primary, secondary and senior secondary schools.*

## Health and Hygiene




*(Ministry of Health and Family Welfare, 2021)[9]*

*Note: Health Index: A weighted composite index based on 24 indicators under the domain of health outcomes, governance and information and key inputs and processes. It is a tool which measures health which changes over time for different geographic areas.*

# Status of National Missions and Programs

| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Gangtok | Namchi and Gangtok |

## SBM Budget Allocation

| Funds Released | | Funds Utilised |
|---|---|---|
| 2.87 crores | SBM 1.0 | 68% |

| Funds Released | | Funds Utilised |
|---|---|---|
| NIL | SBM 2.0 | NIL |

*(Ministry of Housing & Urban Affairs, 2021) [4]*

## Total AMRUT 1.0 Budget: INR 40.06 crore (2015 – 2020)

## Total AMRUT 2.0 Budget: INR 40 crore (2021 – 2026)

### Water Supply

01 Project

12.48% Budget

### Sewerage and Septage Management

NIL Project

34.27% Budget

### Drainage

12 Projects

34.75% Budget

*(State Annual Action Plan (SAAP), Sikkim 2017-20)[5]*

## 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)


*(15th Finance Commission Report for 2021-26)[6]*

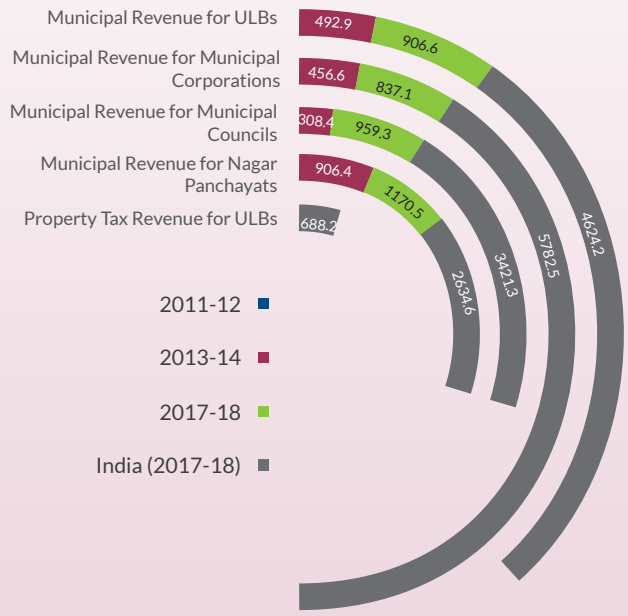
**Grants to local bodies** – Health grants, Rural local bodies, and Urban local bodies.

**Sector Specific grants** – Health, PMGSY Roads, Statistics, Judiciary, Higher Education, Agriculture.

**State specific grants** - Social needs, administrative governance and infrastructure, water and sanitation, preservation of culture and historical monuments, high-cost physical infrastructure, and tourism.

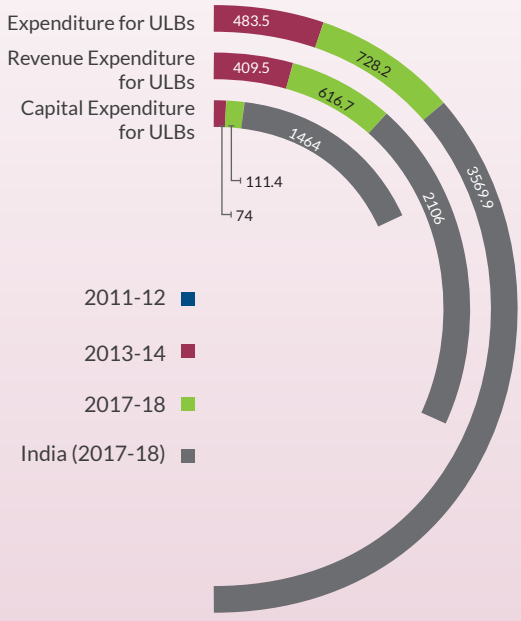
# State Municipal Finances

## Municipal Revenue [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

## Municipal Expenditures [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

# Bibliography


[1] *DES, "Land Use Statistics at a glance 2009-10 to 2018-19," p. 154, 2021, [Online]. Available: https://eands.dacnet.nic.in/LUS_2017-18/Land Use Statistics at a Glance 2008-09 to 2017-18.pdf*

[2] *Government of India, "Population Projections for India and States 2011 - 2036-Report of The Technical Group On Population Projections, July,2020," pp. 26–32, 2020, [Online]. Available: https://main.mohfw.gov.in/sites/default/files/Population Projection Report 2011-2036 - upload_compressed_0.pdf*

[3] *O. Mathur, D. Roy, A. Khare, and S. Mangla, "State of Municipal Finances in India," no. March, 2019.*

[4] *Ministry of Drinking Water & Sanitation, "Swachh Bharat Mission Objectives," no. June, p. 0, 2010, [Online]. Available: http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf*

[5] *AMRUT, "State Annual Action Plan (SAAP) 2017-20," 2017.*

[6] *India, "Report of the 15 th Finance Commission for 2021-26," no. 011, 2021, [Online]. Available: https://prsindia.org/files/policy/policy_committee_reports/Report Summary_15th FC_2021-26.pdf*

[7] *GoI, "SDG India Index & Dashboard 2020-21 report," Partnerships Decad. Action, p. 348, 2021, [Online]. Available: https://niti.gov.in/writereaddata/files/SDG_3.0_Final_04.03.2021_Web_Spreads.pdf*

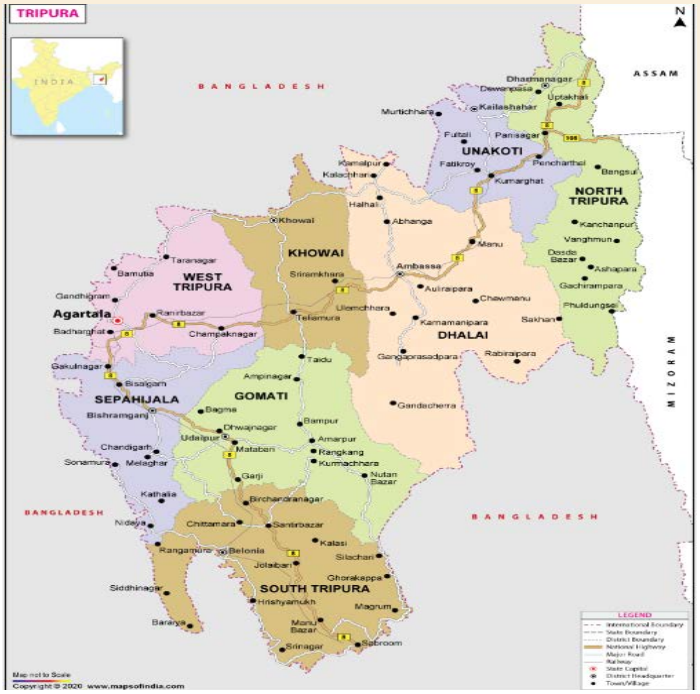
[8] *Ministry of Human Resource Development, "Educational Statistics at a Glance 2018," Educ. Stat. a Glance, pp. 1–127, 2018, [Online]. Available: https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf*

[9] *NITI Aayog, "Health States Progressive India: Health Index Round IV 2019-20," Minist. Heal. Fam. Welf., no. 4, 2021, [Online]. Available: http://indiabudget.nic.in/ub2013-14/eb/sbe47.pdf*

# Tripura

| | |
|---|---|
| Capital | Agartala |
| Districts | 8 |
| Area | 10,491.69 km$^2$ |
| Total Population (2011) | 36,71,032 |
| Density | 350.4 persons/km$^2$ |
| Elevation | 64.9 m above MSL |

*Source: Various*




## Geography

Tripura is a state in north east India bordered by Assam and Mizoram to the east and Bangladesh to the north, south and west. It is the third smallest state of India.

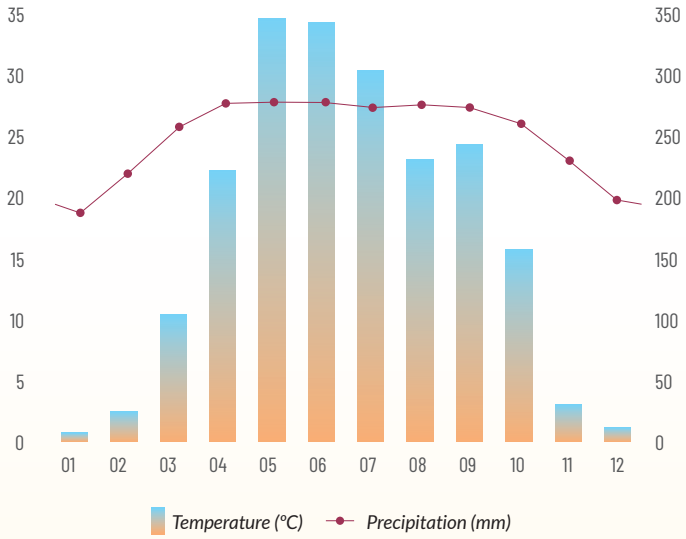
The physiography is characterised by hill ranges, valleys, and plains. The state has five anticlinal ranges of hills running north to south, from Boromura in the west,through Atharamura, Longtharai and Shakhan, to Jampui hills in the east.

## Climate

The state has a tropical savanna climate. The undulating topography leads to local variations, particularly in the hill ranges.

| | |
|---|---|
| Yearly average temperature | 26.43°C |
| Annual precipitation | 203.39 mm |
| Rainy days | 187.28 rainy days |

*Source: Various*

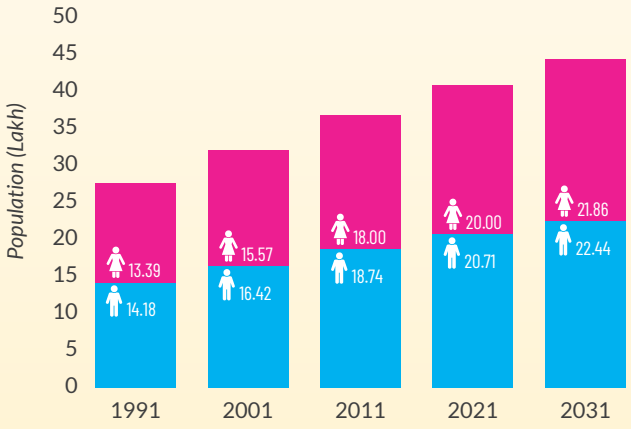



## Demography

As per census 2011, 26.17 % of the total population resides in urban areas and 73.83 % resides in rural areas.

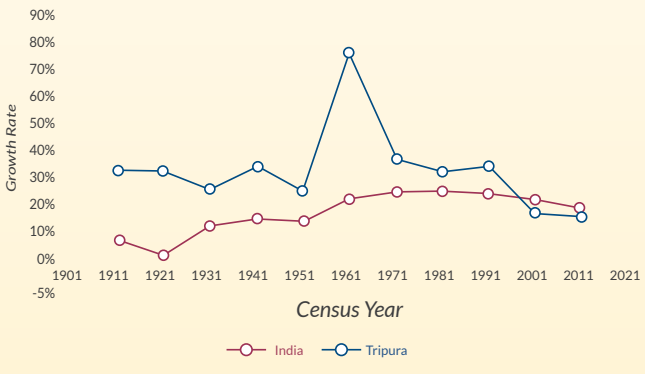
### Sex Ratio


### Population



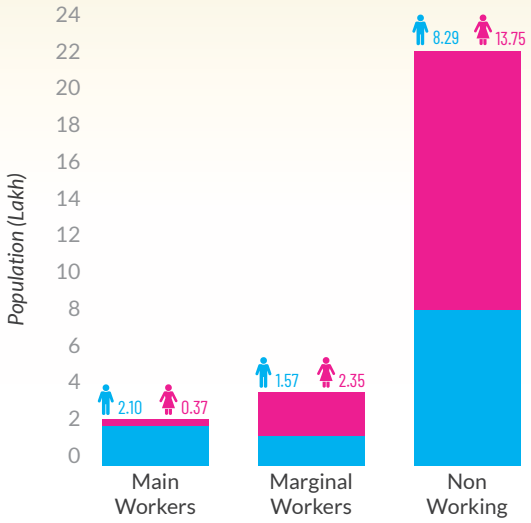

*(Ministry of Health & Family Welfare, 2020)[2]*

### Decadal Variation



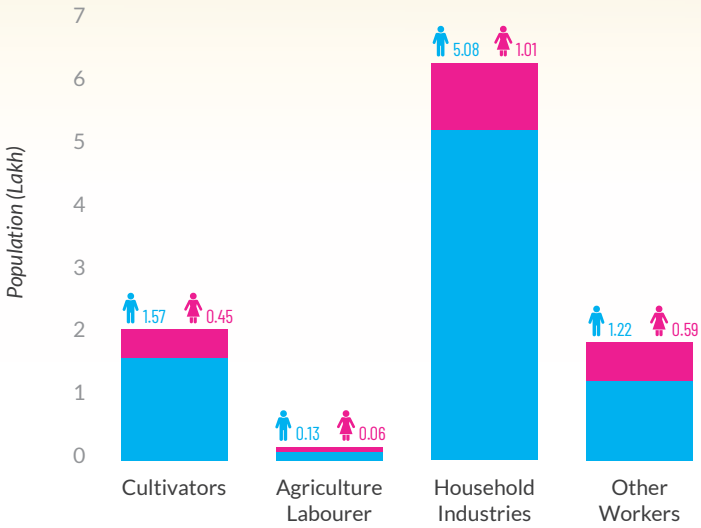

*(Census of India, 2011)*

## Working & Non Working Population

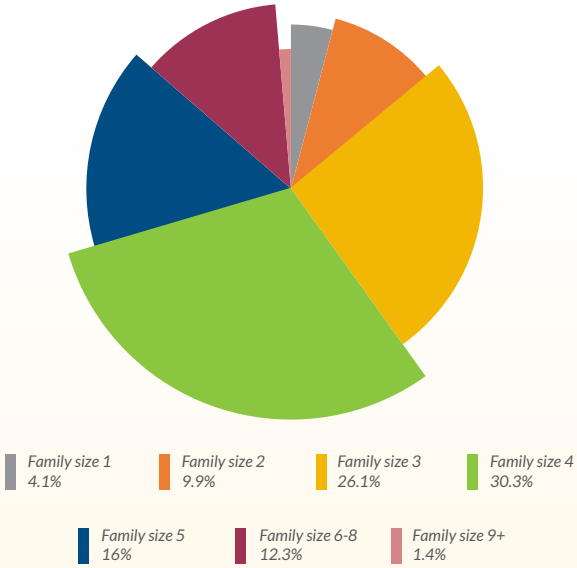



(Census of India, 2011)

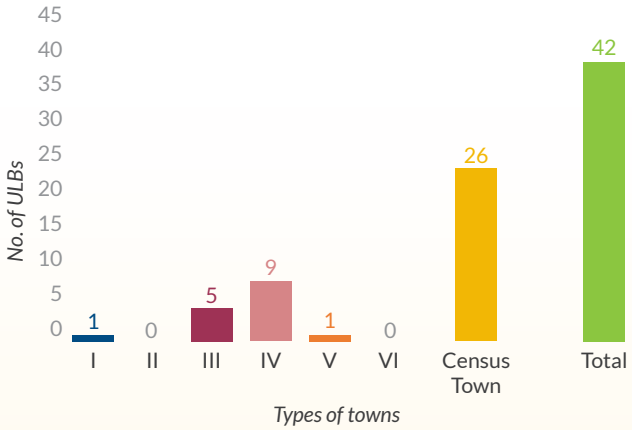
## Main Workers




## Family Size




## Class of Towns




(Census of India, 2011)

## Urban Local Body (ULB)

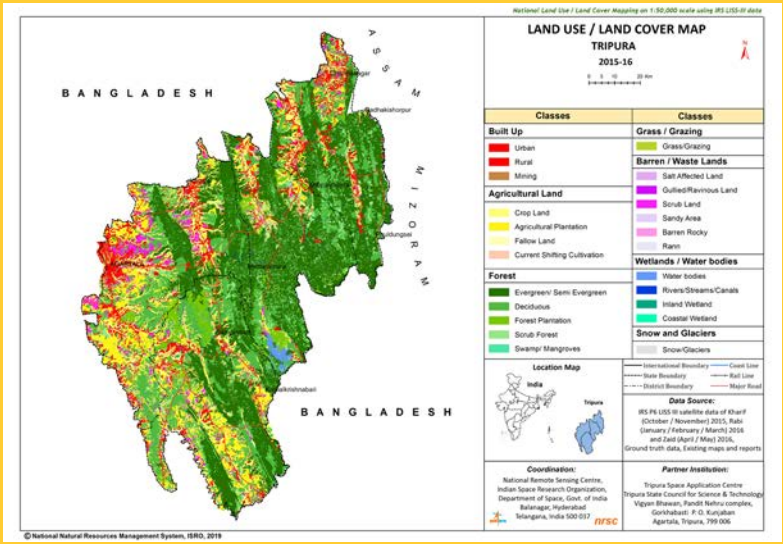
| Municipal Corporations | | | |
|---|---|---|---|
| Number | 1 | Area (sq.km.) | 76.5 |
| Population (Lakh) | 4.4 | Population Density (persons/sq/km.) | 5751.6 |

| Municipal Councils | | | |
|---|---|---|---|
| Number | 13 | Area (sq.km.) | 131.43 |
| Population (Lakh) | 2.7 | Population Density (persons/sq/km.) | 2054.3 |

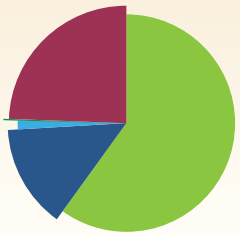
| Nagar Panchayats | | | |
|---|---|---|---|
| Number | 6 | Area (sq.km.) | 34.9 |
| Population (Lakh) | 0.6 | Population Density (persons/sq/km.) | 1719.2 |

*(Indian Council for Research on International Economic Relations, 2019)[3]*

# Land use




*(ISRO, 2019)*



60% Forests

24.2% Net sown area

0.2% Total Fallow Land

14.1% Not under Cultivable Land

1.3% Uncultivable land excluding Fallow Land

| | |
|---|---|
| Geographical Area (Thousand Hectares) | 1,049 |
| Area for Land Utilisation Statistics (Thousand Hectares) | 1,049 |

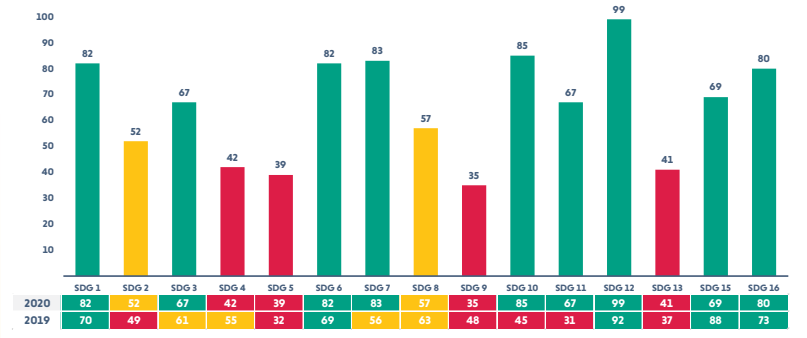
*(Ministry of Agriculture and Farmers Welfare, 2021)[1]*

# SDG Status

The SDG India Index and Dashboard is a crucial tool in India's SDG monitoring efforts. Designed and developed by NITI Aayog, the Index measures the progress at the national and sub-national levels towards meeting the Global Goals and targets


## Performance by Indicator

RANK: 15 Score: 65



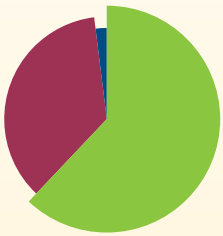

*(NITI Aayog and United Nations, 2021) [7]*

# Access to Water Supply

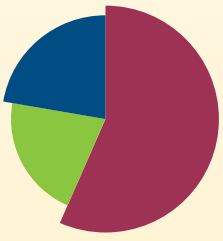
Indicators: ↑Highest ↓Lowest

Agartala is having 70% piped water supply as per baseline in 2015 and AMRUT mission target is 90% (60% will be covered by ongoing ADB & JNNURM Projects).

## State Scenario



*Piped Water Supply 62.05 %* *Groundwater 35.95%* *Surface Water Body 1.98%*



*Near Premises 21.1%* *Within Premises 56.6%* *Away 22.3%*

## Source of Water

| Piped Water Supply | Groundwater | Surface Water Body |
|---|---|---|
| ↑ North Tripura 74% | ↑ West Tripura 51.5% | ↑ Dhalai 4.3% |
| ↓ West Tripura 47% | ↓ North Tripura 24.6% | ↓ South Tripura 0.7% |

*Note - Piped Water connection includes supply of water sourced from groundwater i.e. Well, handpump, tubewell, borewell and spring, and surface water bodies i.e. River, canal, pond and lake.*

## Proximity to the Water Source

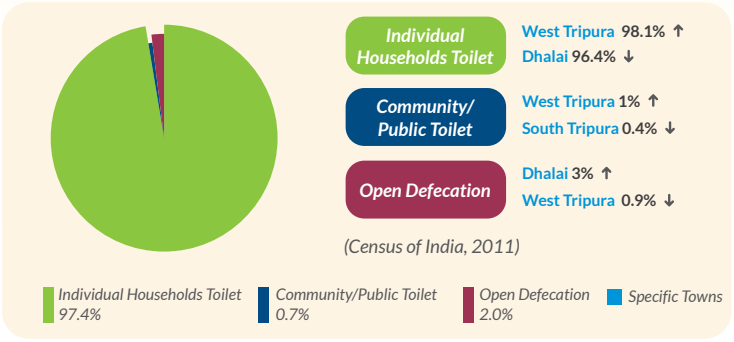
| Near Premises | Within Premises | Away |
|---|---|---|
| ↑ South Tripura 23.9% | ↑ West Tripura 77% | ↑ Dhalai 33.9% |
| ↓ West Tripura 13.8% | ↓ Dhalai 42.4% | ↓ West Tripura 9.2% |

*(Census of India, 2011)*

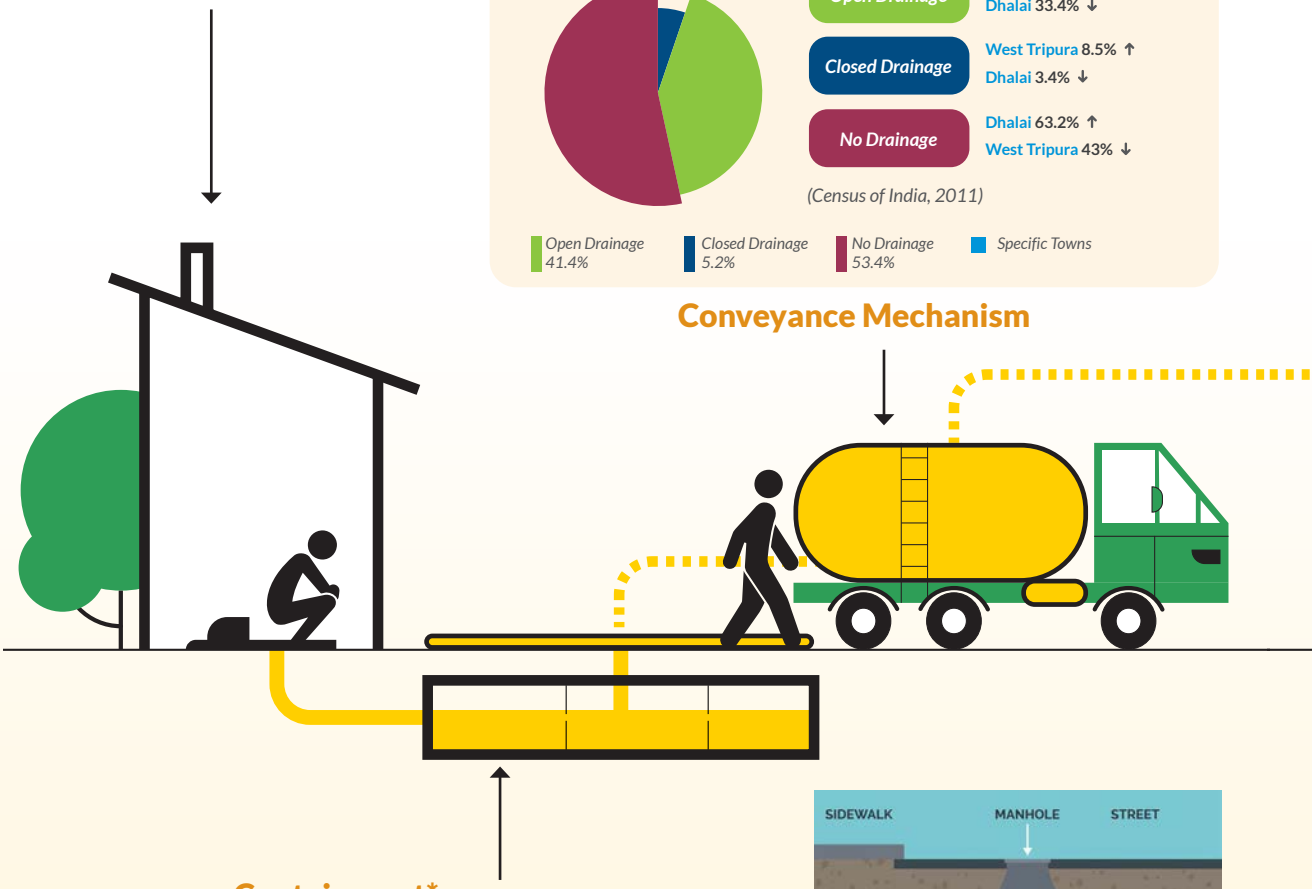
*Specific Cities*

# Access to Sanitation

The state has secured 25th rank in Swachh Survekshan 2021.
Total ULB/Cities – 20
Individual Household Toilet Target: 19,464 | Target Achieved: 107.5%
Community/Public Toilet Target: 586 | Target Achieved: 185.84%
**ODF: 20 ULBs | ODF+: 6 ULBs**




## Access to Toilet



## Conveyance Mechanism

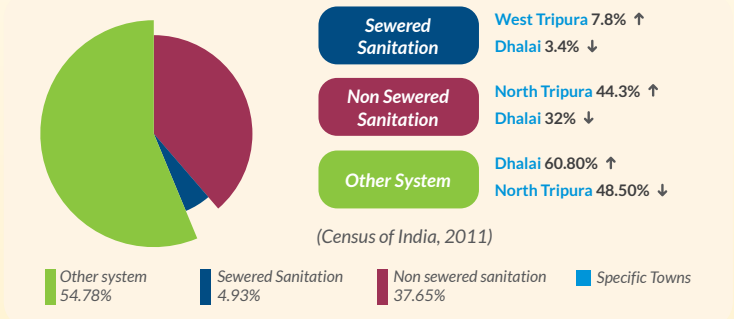






*Note- Drainage refers to type of drainage connectivity for waste water outlet connected to sewered or non-sewered sanitation system. Closed drainage refers to sewered sanitation system. Open drainage refers to non-sewered sanitation and other systems connected to open drains. No drainage refers to having onsite disposal mechanism*

## Containment*



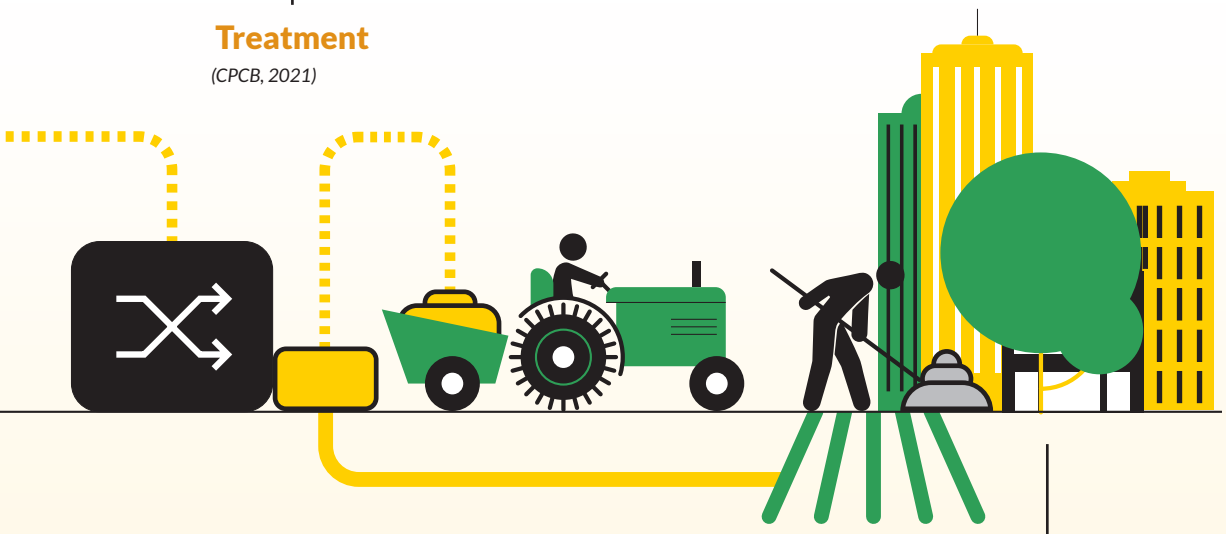

**Attributing percentage of Individual Household Toilet*

*Total Treatment capacity:*
**8 MLD**
*Installed STP capacity:*
**8 MLD**
*Operational STP Capacity:*
**8 MLD**

*Total Sewage generation*
**237 MLD**

## Treatment

*(CPCB, 2021)*



## Enduse/Disposal

**Surface Water Discharge: 81.25%**

**Reuse for watering city parks, gardens, roads etc. 18.75%**

# Solid Waste Management

**No Garbage Free City**


**100%** *Wards*

**257.005 TPD** *Waste Collected*


Material Recovery Facility **02**

Construction and Demolition Waste Recycling Plant **01**

Waste to Compost Plant **06**

Waste to Energy Plant **00**

70.03% Collected Waste gets processed scientifically.


**Scientific Landfills** 03

**Dumpsites** 06

*(SBM Urban,2022)*

# School Sanitation

**4,844** Institutions

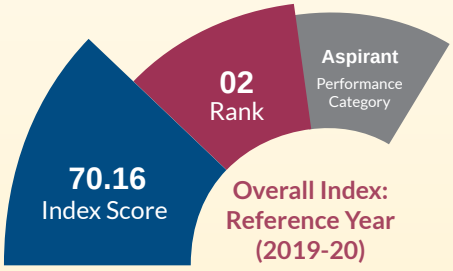
**89.84%** Drinking Water Facility

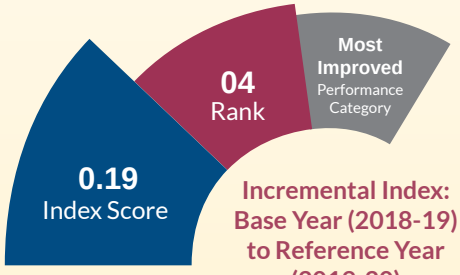
**99.86%** Girls' Toilet

*Source: (National Institute of Educational Planning & Administration, 2018) [8]*

*Note: Institutions include primary, upper primary, secondary and senior secondary schools.*

# Health and Hygiene




*(Ministry of Health and Family Welfare, 2021)[9]*

*Note: Health Index: A weighted composite index based on 24 indicators under the domain of health outcomes, governance and information and key inputs and processes. It is a tool which measures health which changes over time for different geographic areas.*

# Status of National Missions and Programs

| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Agartala | Agartala |

## SBM Budget Allocation

| Funds Released | | Funds Utilised |
|---|---|---|
| 39.46 crores | SBM 1.0 | 74% |

| Funds Released | | Funds Utilised |
|---|---|---|
| 22.54 crores | SBM 2.0 | NIL |

*(Ministry of Housing & Urban Affairs, 2021) [4]*

## Total AMRUT 1.0 Budget: INR 148.25 crore (2015 – 2020)

## Total AMRUT 2.0 Budget: INR 156 crore (2021 – 2026)

| Water Supply | | Sewerage and Septage Management | | Drainage | |
|---|---|---|---|---|---|
| 01 Project | 90.75% Budget | 01 Project | 6.75% Budget | NIL Project | NIL Budget |

*(State Annual Action Plan (SAAP), Tripura 2017-20)[5]*

# 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)


*(15th Finance Commission Report for 2021-26)[6]*

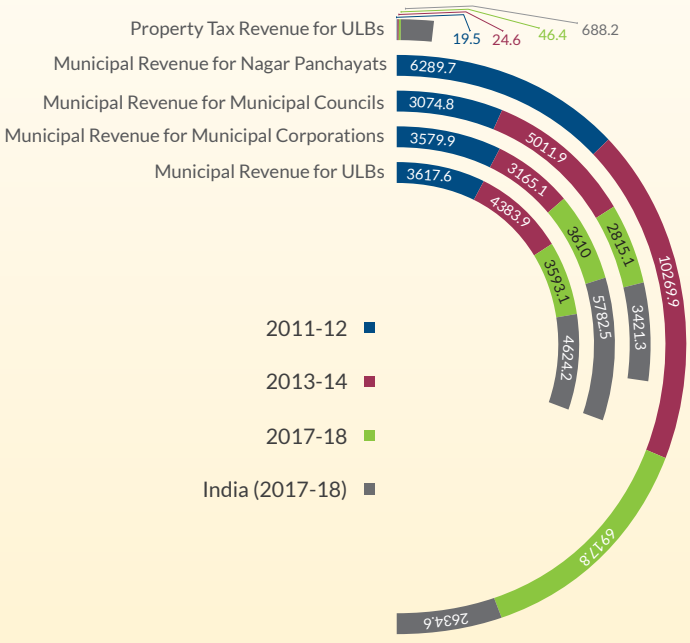
**Grants to local bodies** – Health grants, Rural local bodies, and Urban local bodies.

**Sector specific grants** – Health, PMGSY Roads, Statistics, Judiciary, Higher Education, Agriculture.

**State specific grants** – Social needs, administrative governance and infrastructure, water and sanitation, preservation of culture and historical monuments, high-cost physical infrastructure, and tourism.

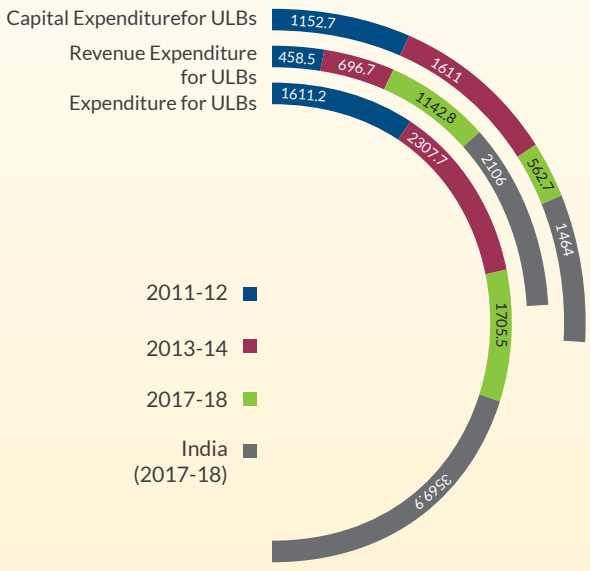
# State Municipal Finances

## Municipal Revenue [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

## Municipal Expenditures [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

# Bibliography


[1] *DES, "Land Use Statistics at a glance 2009-10 to 2018-19," p. 154, 2021, [Online]. Available: https://eands.dacnet.nic.in/LUS_2017-18/Land Use Statistics at a Glance 2008-09 to 2017-18.pdf*

[2] *Government of India, "Population Projections for India and States 2011 - 2036-Report of The Technical Group On Population Projections, July,2020," pp. 26–32, 2020, [Online]. Available: https://main.mohfw.gov.in/sites/default/files/Population Projection Report 2011-2036 - upload_compressed_0.pdf*

[3] *O. Mathur, D. Roy, A. Khare, and S. Mangla, "State of Municipal Finances in India," no. March, 2019.*

[4] *Ministry of Drinking Water & Sanitation, "Swachh Bharat Mission Objectives," no. June, p. 0, 2010, [Online]. Available: http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf*

[5] *AMRUT, "State Annual Action Plan (SAAP) 2017-20," 2017.*

[6] *India, "Report of the 15 th Finance Commission for 2021-26," no. 011, 2021, [Online]. Available: https://prsindia.org/files/policy/policy_committee_reports/Report Summary_15th FC_2021-26.pdf*

[7] *GoI, "SDG India Index & Dashboard 2020-21 report," Partnerships Decad. Action, p. 348, 2021, [Online]. Available: https://niti.gov.in/writereaddata/files/SDG_3.0_Final_04.03.2021_Web_Spreads.pdf*

[8] *Ministry of Human Resource Development, "Educational Statistics at a Glance 2018," Educ. Stat. a Glance, pp. 1–127, 2018, [Online]. Available: https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf*

[9] *NITI Aayog, "Health States Progressive India: Health Index Round IV 2019-20," Minist. Heal. Fam. Welf., no. 4, 2021, [Online]. Available: http://indiabudget.nic.in/ub2013-14/eb/sbe47.pdf*

# Uttarakhand

| | |
|---|---|
| Capital | Gairsain (summer) |
| | Dehradun (winter) |
| Districts | 13 |
| Area | 53,566 km² |
| Total Population (2011) | 1,00,86,292 |
| Density | 189 persons/km² |
| Elevation | 2,189.31 m above MSL |

*Source: Various*


## Geography

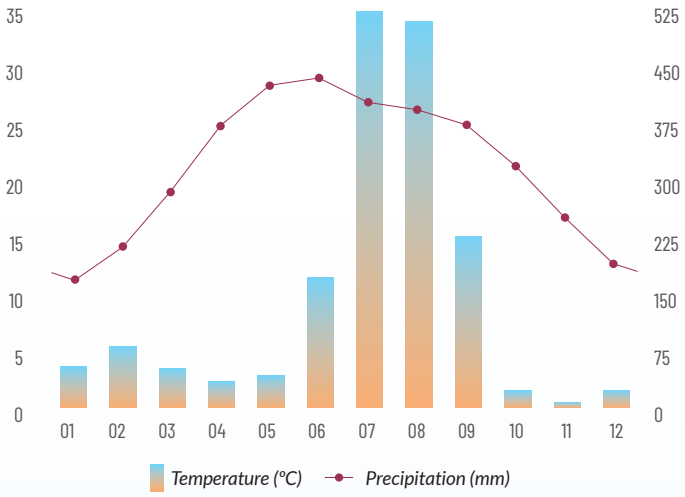
Uttarakhand is also known as Uttaranchal situated in the northern part of India. It borders the Tibet Autonomous Region of China to the north, the Sudurpashchim province of Nepal to the east, the Indian states of Uttar Pradesh to the south and Himachal Pradesh to the west and north-west. Most of the northern part of the state is covered by high Himalayan peaks and glaciers.

## Climate

Uttarakhand has a temperate highland tropical climate with dry winters. Floods and landslides are problems during the rainy season in the lower stretches of the valleys.

| | |
|---|---|
| Yearly average temperature | 23.67°C |
| Annual precipitation | 92.31 mm |
| Rainy days | 110.55 rainy days |

*Source: Various*

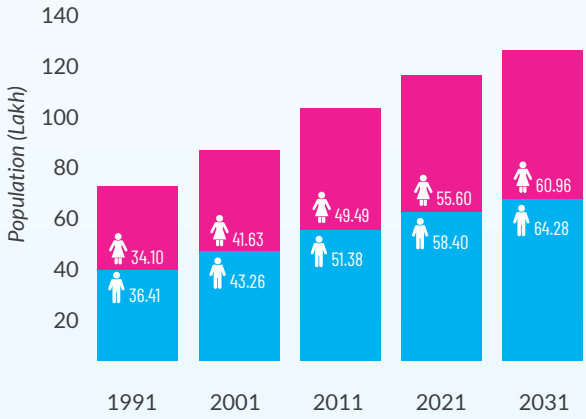



## Demography

As per census 2011, 30.23 % of the total population resides in urban areas and 69.77 % resides in rural areas.

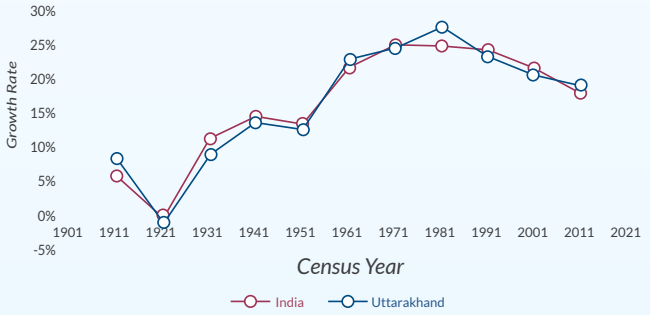
### Sex Ratio


### Population



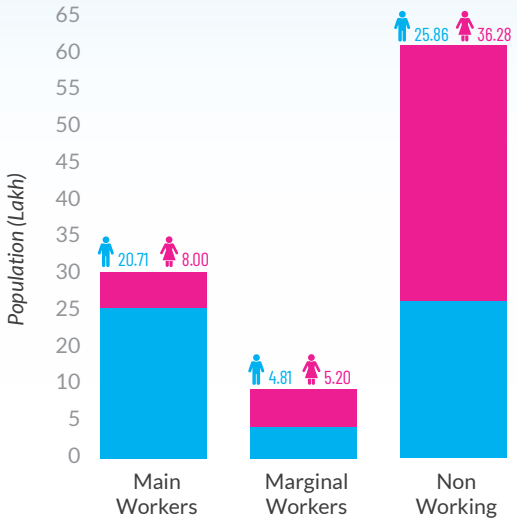

*(Ministry of Health & Family Welfare, 2020)[2]*

### Decadal Variation



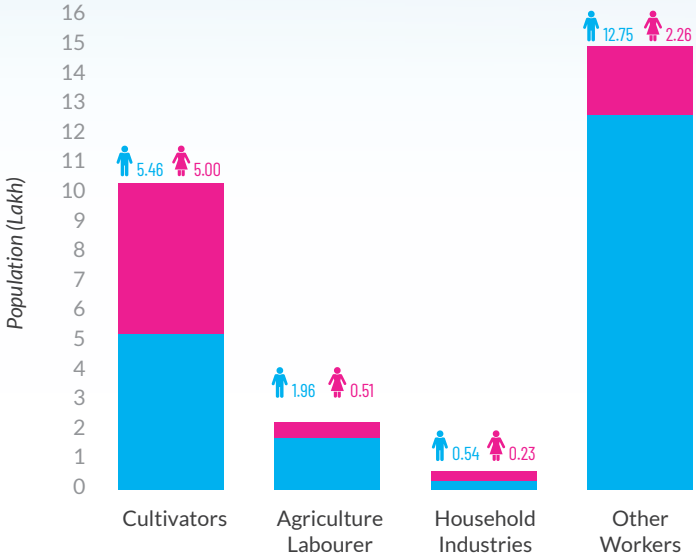

*(Census of India, 2011)*

## Working & Non Working Population

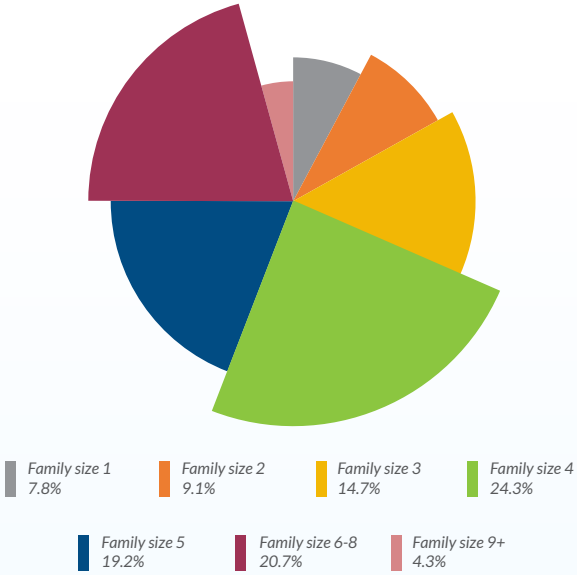



(Census of India, 2011)

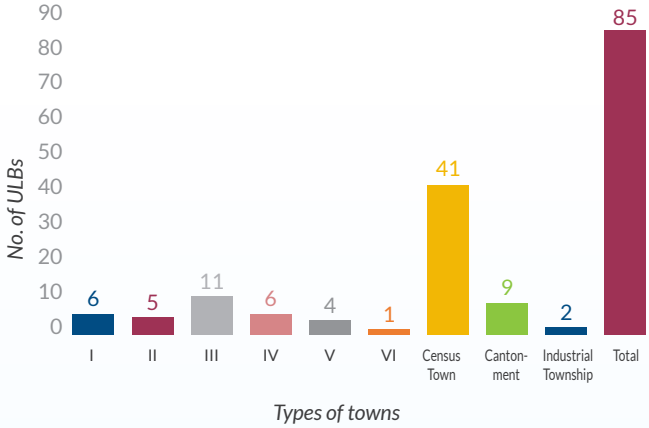
## Main Workers




## Family Size




## Class of Towns




(Census of India, 2011)

## Urban Local Body (ULB)

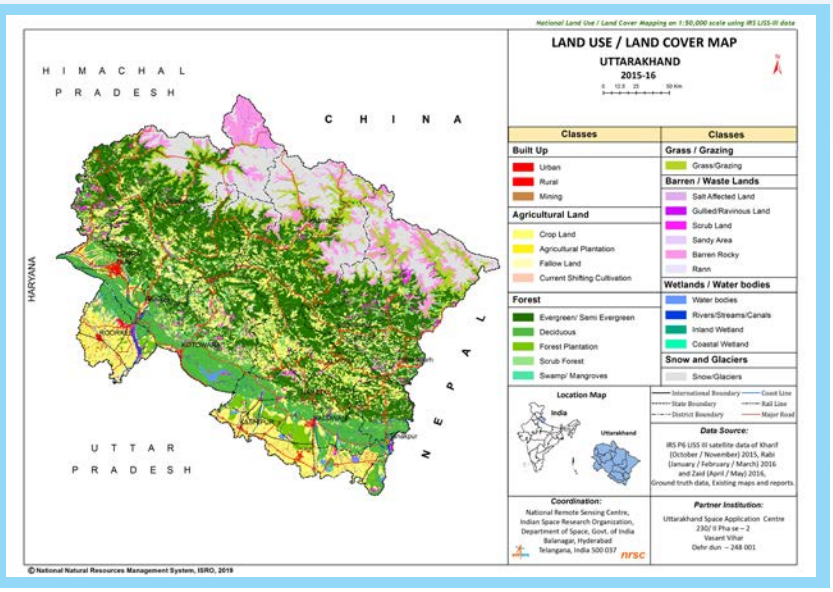
| Municipal Corporations | | | |
|---|---|---|---|
| Number | 8 | Area (sq.km.) | 155.79 |
| Population (Lakh) | 15.4 | Population Density (persons/sq/km.) | 9885.1 |

| Municipal Councils | | | |
|---|---|---|---|
| Number | 42 | Area (sq.km.) | 439.01 |
| Population (Lakh) | 10.5 | Population Density (persons/sq/km.) | 2391.7 |

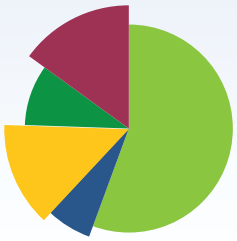
| Nagar Panchayats | | | |
|---|---|---|---|
| Number | 42 | Area (sq.km.) | 148.6 |
| Population (Lakh) | 2.9 | Population Density (persons/sq/km.) | 1951.5 |

*(Indian Council for Research on International Economic Relations, 2019)[3]*

# Land use




*(ISRO, 2019)*



63.5% Forests
7.2% Not under Cultivable Land
10.8% Net sown area
15.5% Uncultivable land excluding Fallow Land
2.9% Total Fallow Land

| | |
|---|---|
| Geographical Area (Thousand Hectares) | 5,348 |
| Area for Land Utilisation Statistics (Thousand Hectares) | 6,002 |

*(Ministry of Agriculture and Farmers Welfare, 2021)[1]*

# SDG Status

The SDG India Index and Dashboard is a crucial tool in India's SDG monitoring efforts. Designed and developed by NITI Aayog, the Index measures the progress at the national and sub-national levels towards meeting the Global Goals and targets


## Performance by Indicator

RANK: 5 Score: 72

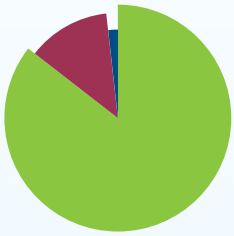

*(NITI Aayog and United Nations, 2021) [7]*

# Access to Water Supply

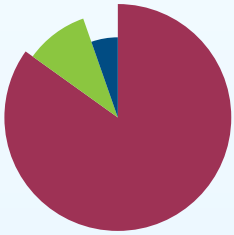
Indicators: ↑Highest ↓Lowest

Dehradun is having 78%, Haridwar is having 90%, Haldwani is having 80%, Rudrapur is having 11%, Kashipur is having 15%, and Roorkee is having 41% piped water supply as per baseline in 2015 and AMRUT mission target is 100% piped water supply.

## State Scenario



*Piped Water Supply 85 %* *Groundwater 13%* *Surface Water Body 2%*



*Near Premises 9.7%* *Within Premises 84.9%* *Away 5.4%*

## Source of Water

| Piped Water Supply | Groundwater | Surface Water Body |
|---|---|---|
| ↑ Rudraprayag 98% | ↑ Udham Singh Nagar 54.9% | ↑ Chamoli 4.8% |
| ↓ Udham Singh Nagar 44.1% | ↓ Rudraprayag 0.7% | ↓ Tehri Garhwal 0.4% |

*Note - Piped Water connection includes supply of water sourced from groundwater i.e. Well, handpump, tubewell, borewell and spring, and surface water bodies i.e. River, canal, pond and lake.*

## Proximity to the Water Source

| Near Premises | Within Premises | Away |
|---|---|---|
| ↑ Bageshwar 18.9 % | ↑ Tehri Garhwal 94.1 % | ↑ Bageshwar 12.3 % |
| ↓ Tehri Garhwal 4.5 % | ↓ Bageshwar 68.8 % | ↓ Tehri Garhwal 1.4 % |

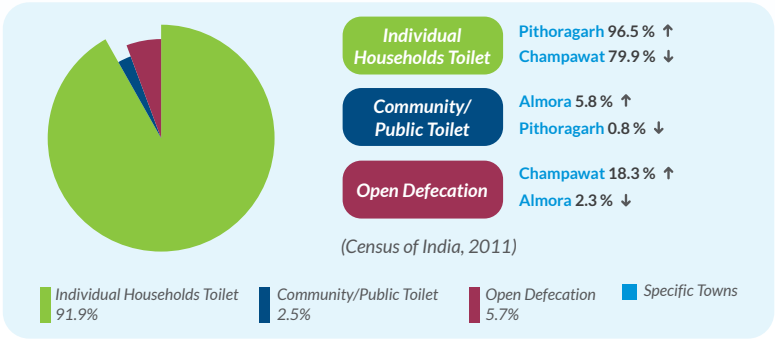
*(Census of India, 2011)*

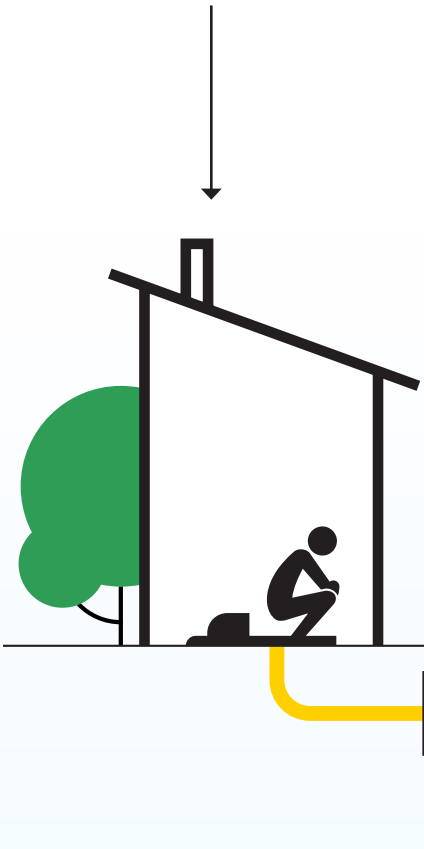
*Specific Cities*

# Access to Sanitation

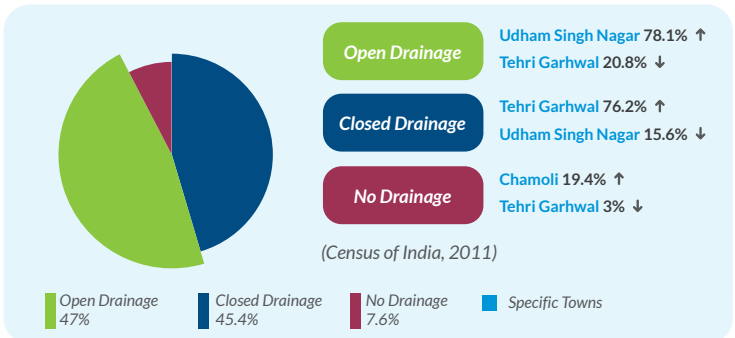
The state has secured 15th rank in Swachh Survekshan 2021.
Total ULB/Cities – 102*
Individual Household Toilet Target: 27,640 | Target Achieved: 86.83%
Community/Public Toilet Target: 2611| Target Achieved: 177.8%
**ODF: 102 ULBs | ODF+: 64 ULBs | ODF++: 3 ULBs**

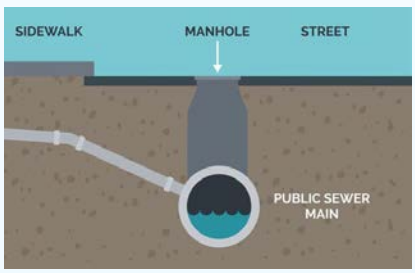
## Access to Toilet



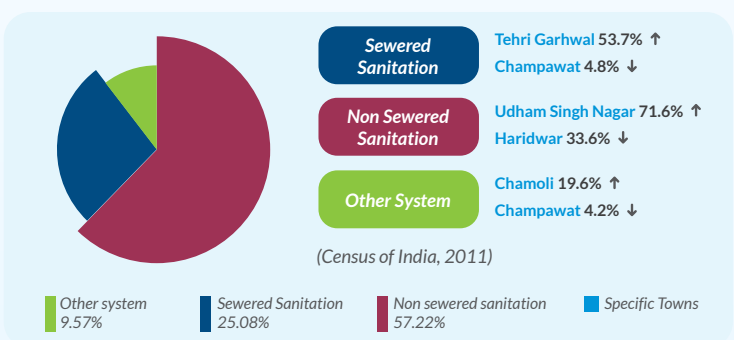
## Conveyance Mechanism




*Note- Drainage refers to type of drainage connectivity for waste water outlet connected to sewered or non-sewered sanitation system. Closed drainage refers to sewered sanitation system. Open drainage refers to non-sewered sanitation and other systems connected to open drains. No drainage refers to having onsite disposal mechanism*

## Containment*




*Attributing percentage of Individual Household Toilet

Operational STP Capacity: 504.41 MLD

Total Sewage generation 372 MLD

FSTP under Construction

125KLD

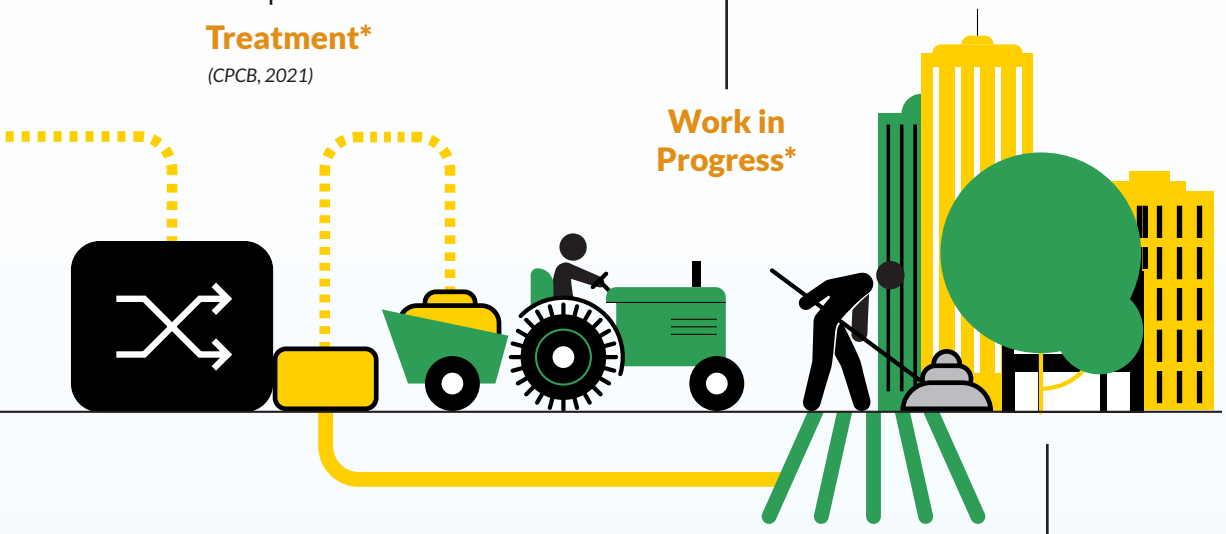
STP Proposed/ Under Construction*

93.3 MLD

Treatment*

(CPCB, 2021)

Work in Progress*



Enduse/Disposal

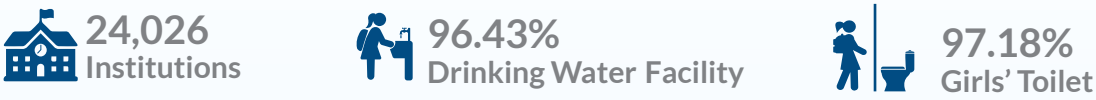
No Reuse and discharge in open

## Solid Waste Management



*(SBM Urban,2022)*

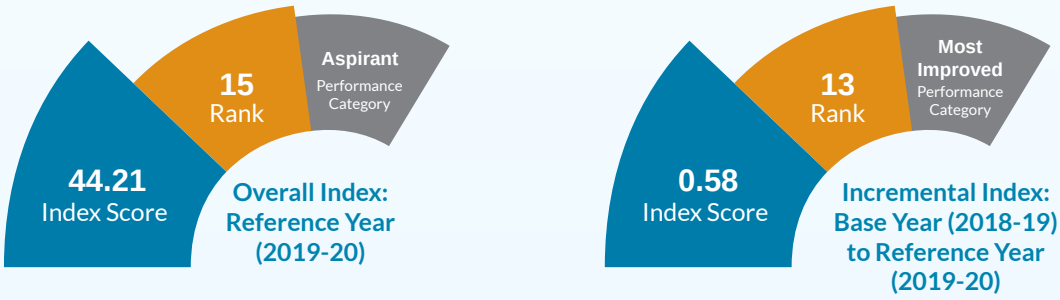
## School Sanitation




*Source: (National Institute of Educational Planning & Administration, 2018) [8]*

*Note: Institutions include primary, upper primary, secondary and senior secondary schools.*

## Health and Hygiene




*(Ministry of Health and Family Welfare, 2021)[9]*

*Note: Health Index: A weighted composite index based on 24 indicators under the domain of health outcomes, governance and information and key inputs and processes. It is a tool which measures health which changes over time for different geographic areas.*

# Status of National Missions and Programs

| AMRUT Program Cities | Smart City Program Cities |
|---|---|
| Dehradun, Haldwani, Hardwar, Kashipur, Nainital, Roorkee, Rudrapur | Dehradun |

## SBM Budget Allocation

| Funds Released | SBM 1.0 | Funds Utilised |
|---|---|---|
| 57.44 crores | | 65% |

| Funds Released | SBM 2.0 | Funds Utilised |
|---|---|---|
| 22.23 crores | | 1% |

*(Ministry of Housing & Urban Affairs, 2021) [4]*

## Total AMRUT 1.0 Budget: INR 593.02 crore (2015 – 2020)

## Total AMRUT 2.0 Budget: INR 582 crore (2021 – 2026)

| Water Supply | | Sewerage and Septage Management | | Drainage | |
|---|---|---|---|---|---|
| 07 Projects | 36.85% Budget | 04 Projects | 9.79% Budget | 04 Projects | 40.78% Budget |

*(State Annual Action Plan (SAAP), Uttrakhand 2017-20)[5]*

## 15th Finance Commission for 2021-26 Grants to State (in Rs Crore)


*(15th Finance Commission Report for 2021-26)[6]*

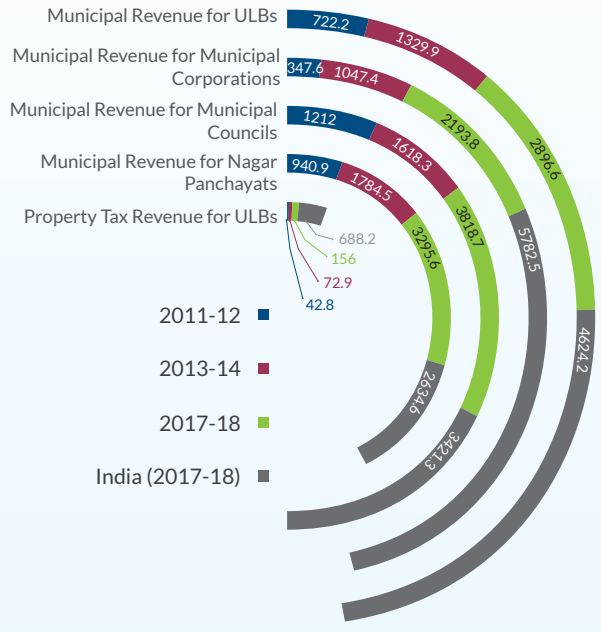
**Grants to local bodies** – Health grants, Rural local bodies, and Urban local bodies.

**Sector specific grants** – Health, PMGSY Roads, Statistics, Judiciary, Higher Education, Agriculture.

**State specific grants** – Social needs, administrative governance and infrastructure, water and sanitation, preservation of culture and historical monuments, high-cost physical infrastructure, and tourism.

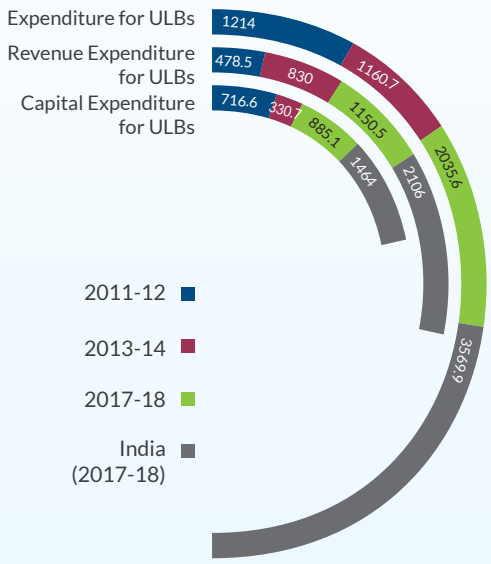
# State Municipal Finances

## Municipal Revenue [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

## Municipal Expenditures [INR per capita]




*Indian Council for Research on International Economic Relations, 2019)[3]*

# Bibliography


[1] *DES, "Land Use Statistics at a glance 2009-10 to 2018-19," p. 154, 2021, [Online]. Available: https://eands.dacnet.nic.in/LUS_2017-18/Land Use Statistics at a Glance 2008-09 to 2017-18.pdf*

[2] *Government of India, "Population Projections for India and States 2011 - 2036-Report of The Technical Group On Population Projections, July,2020," pp. 26–32, 2020, [Online]. Available: https://main.mohfw.gov.in/sites/default/files/Population Projection Report 2011-2036 - upload_compressed_0.pdf*

[3] *O. Mathur, D. Roy, A. Khare, and S. Mangla, "State of Municipal Finances in India," no. March, 2019.*

[4] *Ministry of Drinking Water & Sanitation, "Swachh Bharat Mission Objectives," no. June, p. 0, 2010, [Online]. Available: http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf*

[5] *AMRUT, "State Annual Action Plan (SAAP) 2017-20," 2017.*

[6] *India, "Report of the 15 th Finance Commission for 2021-26," no. 011, 2021, [Online]. Available: https://prsindia.org/files/policy/policy_committee_reports/Report Summary_15th FC_2021-26.pdf*

[7] *GoI, "SDG India Index & Dashboard 2020-21 report," Partnerships Decad. Action, p. 348, 2021, [Online]. Available: https://niti.gov.in/writereaddata/files/SDG_3.0_Final_04.03.2021_Web_Spreads.pdf*

[8] *Ministry of Human Resource Development, "Educational Statistics at a Glance 2018," Educ. Stat. a Glance, pp. 1–127, 2018, [Online]. Available: https://www.mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf*

[9] *NITI Aayog, "Health States Progressive India: Health Index Round IV 2019-20," Minist. Heal. Fam. Welf., no. 4, 2021, [Online]. Available: http://indiabudget.nic.in/ub2013-14/eb/sbe47.pdf*

# 4

# WAY FORWARD

**Research and data analysis:** Continuous research, data collection, and analysis are essential for evidence-based decision-making. Regular monitoring and evaluation of development initiatives in the hilly states will be carried out to help identify gaps, measure progress, and make informed policy decisions.

**Information dissemination:** The report will serve as a single-window source of information. The following version of the report will provide comprehensive and up-to-date information on specific focus area of the states under WASH. The information will be disseminated to various stakeholders, including policymakers, government agencies, researchers, NGOs, and the general public through workshops and conferences

**Prioritize areas for intervention:** The report will aid in the identification and prioritization of specific thematic areas for targeted interventions in the respective states. This will enable the implementation of in-depth interventions that serve as model projects within the region.

In conclusion, the publication on 'State of Water and Sanitation in Hill States' serves multiple purposes, ranging from information dissemination and policy formulation to accountability, advocacy, and long-term planning. These reports play a crucial role in improving water and sanitation services, promoting sustainable development, and enhancing the well-being of communities. Thus, the report will be a living document which will undergo periodic publication at regular intervals.

# ANNEXURE
# STATUS REPORT

The annexure provides comprehensive data on the hill states of the IHR in terms of states profile, climatic conditions, demography, and administrative details. This is followed by insightful details on forestry and agriculture cover, access to Water, Sanitation, Solid Waste Management. The sections end with municipal finances of the states in the IHR.

## State Profile

Table 1 gives the profile of the states in the IHR. It can be observed that Arunachal Pradesh and Assam are the two largest states in the IHR with an area of 83,743 km2 and 78,438 km2 respectively. Jammu and Kashmir has the highest average elevation of 2,717 m above MSL whereasTripura has the lowest average elevation of 65 m above MSL.

**Table 1: Profile of hill states**

| Sr. No. | Details | State Profile | | |
|---|---|---|---|---|
| | State or Union Territory | Districts | Area [km2] | Elevation [m above MSL] |
| 1 | Arunachal Pradesh | 25 | 83,743 | 534 |
| 2 | Assam | 35 | 78,438 | 198 |
| 3 | Himachal Pradesh | 12 | 55,673 | 2,197 |
| 4 | J&K | 20 | 42,241 | 2,717 |
| 5 | Manipur | 16 | 22,327 | 790 |
| 6 | Meghalaya | 12 | 22,429 | 1,528 |
| 7 | Mizoram | 11 | 21,081 | 592 |
| 8 | Nagaland | 16 | 16,579 | 1,334 |
| 9 | Sikkim | 6 | 7,096 | 838 |
| 10 | Tripura | 8 | 10,492 | 65 |
| 11 | Uttarakhand | 13 | 53,566 | 2,189 |

*Source: Various*

## Climatic Condition

The climatic conditions among the states in the IHR varies based on their altitude and the geographic location. The table below provides information on the climatic conditions in the states in IHR. The highest annual average temperature of 26.43 oC is recorded in the state of Tripura whereas the lowest is observed in the state of Sikkim. Similarly, the highest precipitation is recorded in the state of Meghalaya (301.2 mm) and least is recorded at Jammu and Kashmir (40.73 mm).

Table 2: Climatic conditions in the hill states

| Sr. No. | Details | Climate | | |
|---|---|---|---|---|
| | State or Union Territory | Minimum and Maximum temperature [°C] | Precipitation [mm] | Rainy days |
| 1 | Arunachal Pradesh | 13 - 30 | 3300 - 4100 | 188 |
| 2 | Assam | 7-36 | 1800-3000 mm | 191 |
| 3 | Himachal Pradesh | minus 18 - 35 | 1251 mm | 146 |
| 4 | Jammu and Kashmir | minus 2 - 31 | 750 mm | 72 |
| 5 | Manipur | 1 - 34 | 1650 mm | 161 |
| 6 | Meghalaya | 8 - 23 | 10,507 | 236 |
| 7 | Mizoram | 10 - 30 | 2500 | 173 |
| 8 | Nagaland | 4 - 40 | 1800-2500 | 207 |
| 9 | Sikkim | 0 - 28 | 1270 - 5080 | 168 |
| 10 | Tripura | 10 - 33 | 2000 | 187 |
| 11 | Uttarakhand | 7 - 38 | 1500 | 110 |

*Compiled from Wikipedia, Britannica and various Government/Research gate webpages*

The highest number of rainy days are observed in Meghalaya, where it rains almost 237 days in a year whereas the least has been observed in Jammu and Kashmir (73 days) due to its relatively dry climatic conditions.

## Demography

According to the Census of India (2011), the state with highest population is Assam (3.12 crore); followed by Jammu and Kashmir (1.22 crore), and Uttarakhand (1 crore). The state with highest portion of population staying in urban areas is Ladakh (84%); followed by Mizoram (52.11%). The rest of the states have urban population less than India's national average of 31.16%.

## Population Growth Rate

Table 3 provides the details on population, its growth rate in the last decade and share of the population residing in the urban centres of the state. As per the Census of India (2011), Meghalaya has recorded the highest population growth in India of 27.90%, followed by Arunachal Pradesh (26.00%). The other states having population growth rate higher than India's average growth rate are Manipur (24.50%), Jammu & Kashmir (23.60%), Mizoram (23.50%), Uttarakhand (18.80%) and Ladakh (17.70%).

Table 3: Population growth rate from 2001 to 2011 in the hill states

| Sr. No. | State or Union Territory | Population (2011) | Decadal growth (2001–2011) | Urban population | Percent urban |
|---|---|---|---|---|---|
| 1 | Arunachal Pradesh | 13,83,727 | 26.00% | 3,17,369 | 22.94 |
| 2 | Assam | 3,12,05,576 | 17.10% | 43,98,542 | 14.10 |
| 3 | Himachal Pradesh | 68,64,602 | 12.90% | 6,88,552 | 10.03 |
| 4 | Jammu and Kashmir | 1,22,67,032 | 23.60% | 32,02,812 | 26.11 |
| 5 | Ladakh | 2,74,000 | 17.80% | 2,30,160 | 84 |
| 6 | Manipur | 25,70,390 | 24.50% | 7,76,515 | 30.21 |
| 7 | Meghalaya | 29,66,889 | 27.90% | 5,95,450 | 20.07 |
| 8 | Mizoram | 10,97,206 | 23.50% | 5,71,771 | 52.11 |

| Sr. No. | State or Union Territory | Population (2011) | Decadal growth (2001–2011) | Urban population | Percent urban |
|---|---|---|---|---|---|
| 9 | Nagaland | 19,78,502 | −0.6% | 5,70,966 | 28.86 |
| 10 | Sikkim | 6,10,577 | 12.90% | 1,53,578 | 25.15 |
| 11 | Tripura | 36,73,917 | 14.80% | 9,61,453 | 26.17 |
| 12 | Uttarakhand | 1,00,86,292 | 18.80% | 30,49,338 | 30.23 |
| | India | 1,21,05,69,573 | 17.70% | 37,71,06,125 | 31.16 |

*(Source: Census 2011)*

## Population Density

Although the population growth rate is alarmingly high, the population density in the Hill states remains low due to difficult terrain, unfavourable climatic conditions, and inaccessibility. Table 4 shows the population density in each Hilly State and Union Territory in the IHR. Except for Assam (398 persons/km2), all other states have lower population densities when compared India's average population density (382 persons per km2). Ladakh has the lowest population density of 2.8 persons/km2.

**Table 4: Population density of the hill states**

| Sr. No. | State or Union Territory | Population Density [person/km2] |
|---|---|---|
| 1 | Arunachal Pradesh | 17 |
| 2 | Assam | 398 |
| 3 | Himachal Pradesh | 123 |
| 4 | Jammu and Kashmir | 297 |
| 5 | Ladakh | 3 |
| 6 | Manipur | 122 |
| 7 | Meghalaya | 132 |
| 8 | Mizoram | 52 |
| 9 | Nagaland | 119 |
| 10 | Sikkim | 86 |
| 11 | Tripura | 350 |
| 12 | Uttarakhand | 189 |
| Total | India | 382 |

*(Source: Census 2011)*

## Sex Ratio

One of the key demographic factors of the human population around which meaningful analysis is woven is the distribution of the population by gender. The interaction of sex disparities in natality, death, and migration leads to the sex ratio. In a number of ways, a population's gender distribution reflects the socio-economic and cultural trends of a society.[1]

Sex ratio is the number of females per 1000 males. Table 5 gives the ratio for each state and union territory in the IHR. The sex ratio is highest in the state of Meghalaya (989). The other states which have higher sex ratio as compared to India's average of 940 females per 1000 males are Manipur (985), Mizoram (976), Himachal Pradesh (972), Uttarakhand (963), Tripura (960) and Assam (958).

[1] *https://www.ijhssi.org/papers/vol12(1)/J12017989.pdf*

Table 5: Sex ratio of the hill states

| Sr. No. | State or Union Territory | Sex Ratio [females per 1000 males] |
|---|---|---|
| 1 | Arunachal Pradesh | 938 |
| 2 | Assam | 958 |
| 3 | Himachal Pradesh | 972 |
| 4 | Jammu and Kashmir | 889 |
| 5 | Manipur | 985 |
| 6 | Meghalaya | 989 |
| 7 | Mizoram | 976 |
| 8 | Nagaland | 931 |
| 9 | Sikkim | 890 |
| 10 | Tripura | 960 |
| 11 | Uttarakhand | 963 |

*(Source: Census 2011)*

## Working Population

The socio-economic condition of the population residing in the state can be gauged using the employment status. In 2011, the workforce in the Hill States as a Region (41.02%) was higher than that in the Non-Hill States as a Region (39.75%) and India (39.80%).2 Table 6 provides bifurcation of working demography in the states and union territories in the IHR. It can be observed that the average percentage of the population working as main workers which are employed throughout the year is 30% which matches India's percent of main working population. The average percentage of the population working as marginal workers and non-working workers are 12% and 58%, respectively. The highest percent of main workers population i.e. 38% is seen in the state of Mizoram and Sikkim; whereas the lowest is seen in Tripura 9%. The lowest percent of non-working population is observed in the state of Himachal Pradesh (48%). This is due to the job opportunities in agriculture, orchards, and small/large scale industries across the states.

Table 6: Details of working demography in the Hill states

| Sr. No. | Details | Main Workers (in percent) | | | Marginal Workers (in percent) | | | Non-Working (in percent) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Name of States | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 1 | Arunachal Pradesh | 35 | 63 | 37 | 8 | 45 | 55 | 58 | 46 | 54 |
| 2 | Assam | 28 | 81 | 19 | 11 | 46 | 54 | 62 | 38 | 62 |
| 3 | Himachal Pradesh | 30 | 70 | 30 | 22 | 40 | 60 | 48 | 44 | 56 |
| 4 | Jammu Kashmir | 21 | 87 | 13 | 13 | 53 | 47 | 66 | 42 | 58 |
| 5 | Manipur | 34 | 63 | 37 | 12 | 38 | 62 | 54 | 45 | 55 |
| 6 | Meghalaya | 31 | 64 | 36 | 9 | 45 | 55 | 60 | 44 | 56 |
| 7 | Mizoram | 38 | 63 | 37 | 7 | 38 | 62 | 56 | 43 | 57 |
| 8 | Nagaland | 37 | 60 | 40 | 12 | 45 | 55 | 51 | 48 | 52 |
| 9 | Sikkim | 38 | 70 | 30 | 13 | 44 | 56 | 50 | 43 | 57 |
| 10 | Tripura | 9 | 85 | 15 | 14 | 40 | 60 | 78 | 38 | 62 |
| 11 | Uttarakhand | 28 | 72 | 28 | 10 | 48 | 52 | 62 | 42 | 58 |
| India | | 30 | 75 | 25 | 10 | 49 | 51 | 60 | 40 | 60 |

[2] *https://www.ijhssi.org/papers/vol12(1)/J12017989.pdf*

*Source: Census 2011*

Table 7 gives the information on the female working population in the hill states in India. It is worth mentioning that the percentage of female working population is higher in the states of IHR. Eight of the 11 states have a female working population higher than that of India's average i.e. 12%. The highest percent of female working population (22%) are in the state of Himachal Pradesh and Nagaland closely followed by Manipur (20%).

**Table 7: Female working population in the states in IHR**

| Sr. No. | Details | Female Working Population | |
|---|---|---|---|
| | Name of States | Persons | Percent |
| 1 | Arunachal Pradesh | 2,37,384 | 17% |
| 2 | Assam | 34,28,130 | 11% |
| 3 | Himachal Pradesh | 15,16,049 | 22% |
| 4 | J&K | 11,27,623 | 9% |
| 5 | Manipur | 5,65,202 | 20% |
| 6 | Meghalaya | 4,81,910 | 16% |
| 7 | Mizoram | 1,95,965 | 18% |
| 8 | Nagaland | 4,26,765 | 22% |
| 9 | Sikkim | 1,13,780 | 19% |
| 10 | Tripura | 2,71,647 | 10% |
| 11 | Uttarakhand | 13,20,354 | 13% |
| India | | 14,99,48,993 | 12% |

Source: Census 2011

## Administrative Details

Due to the geography and terrain, the states in IHR do not have a lot of large cities. It can be observed in Table 8, that these states have a large number of small towns (Class IV and below). The small towns have different kinds of difficulties when compared to large cities. These urban local bodies are low on human resources and technical experts. Typically, the municipal finances which are discussed in the Section 4.9 are also not in good shape and it becomes difficult for these towns to provide basic environmental sanitation services to its residents properly.

**Table 8: Class wise number of towns in the hill states in India**

| Sr. No. | State or Union Territory | I | II | III | IV | V | VI | Census Towns | Cantonment Board | Industrial Township |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arunachal Pradesh | 0 | 1 | 3 | 7 | 7 | 7 | 2 | 0 | 0 |
| 2 | Assam | 1 | 0 | 3 | 9 | 14 | 5 | 182 | 0 | 0 |
| 3 | Himachal Pradesh | 1 | 0 | 7 | 6 | 14 | 21 | 3 | 7 | 0 |
| 4 | Jammu and Kashmir | 3 | 4 | 11 | 22 | 29 | 13 | 34 | 2 | 0 |
| 5 | Manipur | 1 | 0 | 5 | 7 | 12 | 2 | 24 | 0 | 0 |
| 6 | Meghalaya | 1 | 1 | 2 | 1 | 0 | 0 | 15 | 1 | 0 |
| 7 | Mizoram | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 0 |
| 8 | Nagaland | 1 | 1 | 1 | 0 | 0 | 0 | 23 | 0 | 0 |
| 9 | Sikkim | 1 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 0 |
| 10 | Tripura | 1 | 0 | 5 | 9 | 1 | 0 | 26 | 0 | 0 |
| 11 | Uttarakhand | 6 | 5 | 11 | 6 | 4 | 1 | 41 | 9 | 2 |
| Total | | 16 | 12 | 48 | 69 | 83 | 51 | 375 | 19 | 2 |

*(Source: Census 2011)*

As per the Indian administrative structure of the state, there are three types of ULBs in the states – Municipal Corporation, Municipal Council and Nagar Panchayats. Table 9 provides the numbers of each type of ULB in the states under IHR.

**Table 9: Number of ULBs in the states of Indian Himalayan Region**

| Sr. No. | State or Union Territory | Number of ULBs | | |
|---|---|---|---|---|
| | | Municipal Corporations | Municipal Councils | Nagar Panchayats |
| 1 | Arunachal Pradesh | 0 | 2 | 0 |
| 2 | Assam | 1 | 31 | 56 |
| 3 | Himachal Pradesh | 2 | 31 | 21 |
| 4 | Jammu and Kashmir | 2 | 76 | 0 |
| 5 | Manipur | 1 | 21 | 5 |
| 6 | Meghalaya | 0 | 6 | 0 |
| 7 | Mizoram | 1 | 0 | 0 |
| 8 | Nagaland | 0 | 3 | 29 |
| 9 | Sikkim | 1 | 3 | 3 |
| 10 | Tripura | 1 | 13 | 6 |
| 11 | Uttarakhand | 8 | 42 | 42 |
| Total | | 17 | 228 | 162 |

*Source: Census 2011*

As stated earlier, small towns face different kinds of challenges. These challenges are augmented by the low techno-economic feasibility of the environmental sanitation services due to low population density and the topography. Table 10 shows the varying population density of the three types of ULBs in the states under IHR.

**Table 10: Population density in the ULBs of hill states in India**

| Sr. No. | State or Union Territory | Population Density [persons/km$^2$] | | |
|---|---|---|---|---|
| | | Municipal Corporation | Municipal Council | Nagar Panchayat |
| 1 | Arunachal Pradesh | – | 1,946 | – |
| 2 | Assam | 4,428 | 2,880 | 5,482 |
| 3 | Himachal Pradesh | 5,125 | 2,432 | 1,170 |
| 4 | Jammu and Kashmir | 4,073 | 2,931 | – |
| 5 | Manipur | 9,131 | 1,714 | 1,905 |
| 6 | Meghalaya | – | 4,847 | – |
| 7 | Mizoram | 2,232 | – | – |
| 8 | Nagaland | – | 6,171 | 2,545 |
| 9 | Sikkim | 5,184 | 2,326 | 4,320 |
| 10 | Tripura | 5,752 | 2,054 | 1,719 |
| 11 | Uttarakhand | 9,885 | 2,392 | 1,952 |
| Average Population Density | | 5,055 | 2,662 | 3,430 |

*(Source: Census 2011)*

Higher population density provides an opportunity to make municipal services more affordable to the residents of the city; however, there are only 17 Municipal Corporations with average population density of 5,055 persons per km2, compared to 228 and 162 Municipal Councils and Nagar Panchayats with average population density of 2,662 and 3,430 persons per km2, respectively.

## Land Use

Table 11 shows the total geographic area, the area under land utilisation statistics and the forest. The Indian Himalayan Region states are well known for their forest cover. As seen in the table below, the average percent of land under forest is 59%. The highest coverage is in Arunachal Pradesh (93%), followed by Manipur and Mizoram, both of which have 78%. The least forest coverage is seen in the states of Assam and Himachal Pradesh 24% and 25%, respectively..

**Table 11: Forest cover in the states in IHR**

| Sr. No. | State or Union Territory | Land Use | | |
|---|---|---|---|---|
| | | Geographical Area | Area for Land Utilisation Statistics | Forests |
| 1 | Arunachal Pradesh | 8374 | 7172 | 93% |
| 2 | Assam | 7844 | 7844 | 24% |
| 3 | Himachal Pradesh | 5567 | 4577 | 25% |
| 4 | Jammu and Kashmir | 22224 | 4130 | 57% |
| 5 | Manipur | 2233 | 2161 | 78% |
| 6 | Meghalaya | 2243 | 2196 | 41% |
| 7 | Mizoram | 2108 | 2039 | 78% |
| 8 | Nagaland | 1658 | 1653 | 52% |
| 9 | Sikkim | 710 | 441 | 76% |
| 10 | Tripura | 1049 | 1049 | 60% |
| 11 | Uttarakhand | 5348 | 6002 | 64% |

*Source: Ministry of Agriculture 2021*

Table 12 gives details of the non-forest land use in the states in IHR. The state with largest area under fallow land and net sown area is Tripura; followed by Assam and Nagaland.

**Table 12: Land use details in the hill states in India (source: Ministry of Agriculture 2021)**

| Sr. No. | State or Union Territory | Land Use | | | |
|---|---|---|---|---|---|
| | | Not under Cultivable Land | Uncultivated land excluding Fallow Land | Total Fallow Lands | Net area sown |
| 1 | Arunachal Pradesh | 1% | 2% | 1% | 3% |
| 2 | Assam | 32% | 7% | 3% | 35% |
| 3 | Himachal Pradesh | 25% | 37% | 2% | 12% |
| 4 | Jammu and Kashmir | 14% | 8% | 4% | 17% |
| 5 | Manipur | 1% | 0% | 0% | 20% |
| 6 | Meghalaya | 13% | 25% | 10% | 12% |
| 7 | Mizoram | 4% | 3% | 9% | 7% |
| 8 | Nagaland | 7% | 8% | 10% | 23% |
| 9 | Sikkim | 2% | 2% | 3% | 17% |

| Sr. No. | State or Union Territory | Land Use | | | |
|---|---|---|---|---|---|
| | | Not under Cultivable Land | Uncultivated land excluding Fallow Land | Total Fallow Lands | Net area sown |
| 10 | Tripura | 14% | 1% | 24% | 46% |
| 11 | Uttarakhand | 7% | 16% | 11% | 17% |

## Access to Water

To understand the access to water in the state, Census of India provides two parameters – source of water and proximity to the water source. Table 13 provides the details of access to water from Census of India 2011 for the states in the IHR. Access to piped water supply is good in these states with an average of 68%. However, dependence of groundwater is high in some states such as Assam, Mizoram, Nagaland and Meghalaya. Access to water directly through surface water bodies is highest in Manipur (27%), followed by Nagaland (21%).

**Table 13: Percent of households having access to different source of water in hill states**

| Sr. No. | State or Union Territory | Source of Water [% of total households] | | |
|---|---|---|---|---|
| | | Piped water supply | Groundwater | Surface Water Body |
| 1 | Arunachal Pradesh | 90 | 8 | 2 |
| 2 | Assam | 25 | 72 | 3 |
| 3 | Himachal Pradesh | 95 | 4 | 1 |
| 4 | Jammu and Kashmir | 83 | 13 | 5 |
| 5 | Manipur | 42 | 31 | 27 |
| 6 | Meghalaya | 60 | 34 | 5 |
| 7 | Mizoram | 68 | 44 | 8 |
| 8 | Nagaland | 40 | 40 | 21 |
| 9 | Sikkim | 94 | 5 | 1 |
| 10 | Tripura | 62 | 36 | 2 |
| 11 | Uttarakhand | 85 | 13 | 2 |
| Average | | 68 | 27 | 7 |

*Source: Census 2011*

The proximity to the source of water signifies the time and efforts invested by the household to access water and indirectly provides insights on water consumption behaviour and perception towards water and its usage. Table 14 provides the details of average proximity to the water source in the states or union territories in the IHR. Uttarakhand has the highest percent of households with piped water supply. Proximity to source is not good in the states Nagaland and Manipur where access to water is largely met by surface water bodies.

**Table 14: Percent of households having different proximity to the source of water in hill states**

| Sr. No. | State or Union Territory | Proximity to Source [% of total households] | | |
|---|---|---|---|---|
| | | Within premises | Near premises | Away |
| 1 | Arunachal Pradesh | 67 | 27 | 7 |
| 2 | Assam | 78 | 14 | 8 |
| 3 | Himachal Pradesh | 32 | 4 | 1 |
| 4 | Jammu and Kashmir | 73 | 17 | 10 |
| 5 | Manipur | 30 | 43 | 27 |

| Sr. No. | State or Union Territory | Proximity to Source [% of total households] | | |
|---|---|---|---|---|
| | | Within premises | Near premises | Away |
| 6 | Meghalaya | 44 | 37 | 19 |
| 7 | Mizoram | 43 | 39 | 18 |
| 8 | Nagaland | 38 | 33 | 29 |
| 9 | Sikkim | 75 | 18 | 7 |
| 10 | Tripura | 57 | 21 | 22 |
| 11 | Uttarakhand | 85 | 10 | 5 |
| Average | | 57 | 24 | 14 |

*Source: Census 2011*

## Access to Sanitation

Access to sanitation is gauged using access to toilet, conveyance, treatment and safe disposal or reuse.

### Access to Toilet

As per the Census of India 2011, the access to toilets is better in the IHR states. It can be observed from Table 15 that the average access to Individual household toilets is 92%. However, it is expected that post Swachh Bharat Mission's first phase, the access to toilets must have improved significantly as all the states have been declared ODF.

**Table 15: Access to toilet in the hill states in India**

| Sr. No. | State or Union Territory | Access to Toilet [% of total urban households] | | |
|---|---|---|---|---|
| | | Individual Household Toilet | Community/ Public Toilet | Open Defecation |
| 1 | Arunachal Pradesh | 86 | 4 | 10 |
| 2 | Assam | 92 | 1 | 6 |
| 3 | Himachal Pradesh | 89 | 3 | 8 |
| 4 | Jammu and Kashmir | 84 | 2 | 14 |
| 5 | Manipur | 96 | 2 | 2 |
| 6 | Meghalaya | 93 | 2 | 5 |
| 7 | Mizoram | 98 | 1 | 1 |
| 8 | Nagaland | 93 | 3 | 5 |
| 9 | Sikkim | 95 | 4 | 2 |
| 10 | Tripura | 97 | 1 | 2 |
| 11 | Uttarakhand | 92 | 2 | 6 |
| Average | | 92 | 2 | 5 |

*Source: Census 2011*

### Access to Collection and Conveyance

Access to collection and conveyance show how the septic effluent and grey water is being managed in the states. The higher percentage of households without a drainage system indicates that these households have soak pits or other arrangements for wastewater management at the household level. This is beneficial for the ULB and the state government as less utility infrastructure is needed for wastewater management. Table 16 provides the percent of the total urban households and the options of collection and conveyance to which they are connected.

**Table 16: Details of access of collection and conveyance in the Hill states**

| Sr. No. | State or Union Territory | Collection and Conveyance [% of total urban households] | | |
|---|---|---|---|---|
| | | Closed Drainage | Open Drainage | No Drainage |
| 1 | Arunachal Pradesh | 15 | 51 | 33 |
| 2 | Assam | 11 | 34 | 55 |
| 3 | Himachal Pradesh | 59 | 33 | 8 |
| 4 | Jammu and Kashmir | 26 | 50 | 23 |
| 5 | Manipur | 6 | 59 | 35 |
| 6 | Meghalaya | 13 | 49 | 39 |
| 7 | Mizoram | 14 | 55 | 31 |
| 8 | Nagaland | 6 | 61 | 33 |
| 9 | Sikkim | 22 | 65 | 13 |
| 10 | Tripura | 5 | 41 | 53 |
| 11 | Uttarakhand | 45 | 47 | 8 |
| Average | | 20 | 50 | 30 |

*Source: Census 2011*

The highest percentage of households managing wastewater on site is in the state of Assam (55%), followed by Tripura (53%). The states where wastewater from 92% of the households is managed by drainage networks (mostly surface drains) is Uttarakhand and Himachal Pradesh.

## Treatment

As per the National Inventory of Sewage Treatment Plants in India published by CPHEEO in March 2021, the total sewage generation in IHR is 3,086 MLD. Table 17 gives the details of capacity of the treatment infrastructure in the hill states in the IHR. The total capacity of the treatment infrastructure in the IHR states is 1033 MLD; out of which 884 MLD (86%) is the capacity of installed infrastructure and 149 MLD (14%) is the capacity of proposed infrastructure. It should be noted that not all the installed infrastructure is operational.

It is worthy to note that Himachal Pradesh has treatment capacity (155 MLD) and installed capacity (136 MLD) of the treatment infrastructure higher than the sewage generated in the state (116 MLD). Uttarakhand has a total treatment capacity of 85% of the sewage generated.

**Table 17: Inventory of the STPs in the states in IHR**

| Sr. No. | State or Union Territory | Total Sewage Generation (MLD) | Total Treatment Capacity (MLD) | Installed STP Capacity (MLD) | Proposed STP Capacity (MLD) |
|---|---|---|---|---|---|
| 1 | Arunachal Pradesh | 62 | 0 | 0 | 0 |
| 2 | Assam | 809 | 0 | 0 | 0 |
| 3 | Himachal Pradesh | 116 | 155 | 136 | 19 |
| 4 | Jammu and Kashmir | 665 | 222 | 218 | 4 |
| 5 | Manipur | 168 | 93 | 44 | 49 |
| 6 | Meghalaya | 112 | 0 | 0 | 0 |
| 7 | Mizoram | 103 | 10 | 10 | 0 |
| 8 | Nagaland | 135 | 0 | 0 | 0 |
| 9 | Sikkim | 52 | 30 | 20 | 10 |
| 10 | Tripura | 237 | 8 | 8 | 0 |

| Sr. No. | State or Union Territory | Total Sewage Generation (MLD) | Total Treatment Capacity (MLD) | Installed STP Capacity (MLD) | Proposed STP Capacity (MLD) |
|---|---|---|---|---|---|
| 11 | Uttarakhand | 627 | 515 | 448 | 67 |
| Total | | 3086 | 1033 | 884 | 149 |

*Source: CPCB 2021*

Table 18 provides the detailed information of the installed capacity of the treatment infrastructure in the states in the IHR. Out of the installed treatment capacity of 884 MLD, only 590 MLD (67%) is the operational capacity and 260 MLD (29%) is capacity of the infrastructure under-construction. The infrastructure with a treatment capacity of 34 MLD (4%) is non-operational.

**Table 18: Details of the installed stps in the hill states in India**

| Sr. No. | State or Union Territory | Installed STP capacity (MLD) | Operational STP capacity (MLD) | Non Operational STP capacity (MLD) | Under Construction STP capacity (MLD) |
|---|---|---|---|---|---|
| 1 | Arunachal Pradesh | 0 | 0 | 0 | 0 |
| 2 | Assam | 0 | 0 | 0 | 0 |
| 3 | Himachal Pradesh | 136 | 99 | 0 | 37 |
| 4 | Jammu and Kashmir | 218 | 93 | 24 | 101 |
| 5 | Manipur | 44 | 27 | 0 | 17 |
| 6 | Meghalaya | 0 | 0 | 0 | 0 |
| 7 | Mizoram | 10 | 0 | 10 | 0 |
| 8 | Nagaland | 0 | 0 | 0 | 0 |
| 9 | Sikkim | 20 | 18 | 0 | 2 |
| 10 | Tripura | 8 | 8 | 0 | 0 |
| 11 | Uttarakhand | 448 | 345 | 0 | 103 |
| Total | | 884 | 590 | 34 | 260 |

*Source: CPCB 2021*

Himachal Pradesh has the highest operational treatment capacity (85%), as compared to the sewage generated. This is followed by Uttarakhand, which has the capacity l to treat 55% of the sewage generated in the state.

### Reuse and Disposal

As per the SBM Urban Portal, only the state of Tripura reports reusing 18.75% of treated used water for watering city parks, gardens, and roads etc. All the other states have reported to discharge the treated used water into the surface water bodies, to maintain the environmental flow in the rivers.

## Solid Waste Management

The Swachh Bharat Urban Portal provides details about the solid waste management at the state level. The data regarding door to door collection, waste processing and disposal mechanism is provided on the portal and has been compiled and analysed below in the sections 4.8.1, 4.8.2, and 4.8.3.

Under the SBM Phase I, MoHUA had also defined a parameter called Garbage Free City (GFC). Currently there are 7 GFC cities in the Indian Himalayan Region. The name of the seven cities and the states is provided in Table 19.

**Table 19: Garbage free cities in the states in IHR**

| Sr. No. | State or Union Territory | Garbage Free City |
|---|---|---|
| 1 | Assam | Tezpur |
| 2 | Himachal Pradesh | Dharamshala |
| 3 | Manipur | Jiribam |
| 4 | Uttarakhand | Dehradun, Doiwala, Narendranagar, Rishikesh |

*Source: SBM Urban 2022*

## Door to Door Collection

Table 20 gives details of the quantity of solid waste collected and the collection efficiency. On an average, 87% of the wards are covered through door-to-door waste collection in the states under IHR. This results in cumulative collection of 5190 TPD of solid waste. Although Assam (1104 TPD) and Jammu and Kashmir (1160 TPD) have higher populations, the waste collected in these states is less than that in Uttarakhand (1540 TPD). The state of Sikkim and Tripura has 100% wards covered through door-to-door collection.

**Table 20: Details of door-to-door collection of solid waste in the hill states of India**

| Sr. No. | Details | Door to door collection/segregation | |
|---|---|---|---|
| | State or Union Territory | Waste Collected (TPD) | Number of wards covered (%) |
| 1 | Arunachal Pradesh | 111.45 | 97.4 |
| 2 | Assam | 1,103.77 | 89.41 |
| 3 | Himachal Pradesh | 170.91 | 97.44 |
| 4 | Jammu and Kashmir | 1,159.63 | 99.9 |
| 5 | Manipur | 48.25 | 98 |
| 6 | Meghalaya | 1.68 | 74.3 |
| 7 | Mizoram | 163.27 | 52.68 |
| 8 | Nagaland | 559.79 | 49.05 |
| 9 | Sikkim | 73.78 | 100 |
| 10 | Tripura | 257.01 | 100 |
| 11 | Uttarakhand | 1,540.30 | 99.66 |
| | Total | 5,189.82 | 87.08 |

*(Source: SBM Urban 2022)*

## Waste Processing Infrastructure

Table 21 provides the details of solid waste processing infrastructure in the states of the IHR. As per the SBM Urban Portal, there are 364 Material Recovery Facilities (MRF), 811 Waste to Compost Plants, 76 Construction and Demolition (C&D) Waste Recycling Plants and 14 Waste to Energy Plants. On an average, 44% of the collected waste gets scientifically processed in these states. The highest scientific waste processing happens in the state of Jammu and Kashmir (75%) and Himachal Pradesh (74%).

Table 21: Details of waste processing infrastructure in the hill states in India

| Sr. No. | Details | Waste Processing | | | | |
|---|---|---|---|---|---|---|
| | State or Union Territory | MRF | Waste to Compost Plant | C&D Waste Recycling Plant | Waste to Energy Plant | Scientifically processed waste (%) |
| 1 | Arunachal Pradesh | 9 | 2 | 1 | 0 | 29.2 |
| 2 | Assam | 174 | 346 | 9 | 2 | 60.5 |
| 3 | Himachal Pradesh | 51 | 63 | 36 | 5 | 73.76 |
| 4 | Jammu and Kashmir | 15 | 214 | 4 | 0 | 74.8 |
| 5 | Manipur | 30 | 29 | 9 | 5 | 93 |
| 6 | Meghalaya | 0 | 0 | 0 | 1 | 0 |
| 7 | Mizoram | 4 | 6 | 0 | 0 | 0.45 |
| 8 | Nagaland | 10 | 19 | 2 | 0 | 0.12 |
| 9 | Sikkim | 3 | 2 | 0 | 0 | 11.3 |
| 10 | Tripura | 2 | 6 | 1 | 0 | 70.03 |
| 11 | Uttarakhand | 66 | 124 | 14 | 1 | 70.8 |
| | Total | 364 | 811 | 76 | 14 | 44.00 |

*Source: SBM Urban 2022*

### Disposal Mechanism

As per the data provided on the SBM Urban portal which has been compiled in the Table 22, there are more dumpsites (224) as compared to scientific landfills (101). The state of Uttarakhand has the highest number of scientific landfills (30 no.), followed by Jammu & Kashmir (27 no.), whereas the highest number of dumpsites are found in the state of Assam (66 no.).

Table 22: Details of disposal mechanism of solid waste in the states in Indian himalayan region

| Sr. No. | Details | Disposal Mechanism | |
|---|---|---|---|
| | State or Union Territory | Scientific Landfills | Dumpsites |
| 1 | Arunachal Pradesh | 8 | 19 |
| 2 | Assam | 9 | 66 |
| 3 | Himachal Pradesh | 4 | 11 |
| 4 | Jammu and Kashmir | 27 | 44 |
| 5 | Manipur | 9 | 3 |
| 6 | Meghalaya | 1 | 6 |
| 7 | Mizoram | 10 | 8 |
| 8 | Nagaland | 0 | 12 |
| 9 | Sikkim | 0 | 0 |
| 10 | Tripura | 3 | 6 |
| 11 | Uttarakhand | 30 | 49 |
| | Total | 101 | 224 |

## Municipal Finances

The State of Municipal Finances in India Report published by Indian Council for Research on International Economic Relations in March 2019 provides the details of municipal finances of the states in India. The tables in the following sections are compiled from the above report and provide the details for the Financial Year 2017-18.

## Municipal Revenue and Property Tax

Table 23 provides the details of municipal revenues and property taxes in INR per capita for the financial year 2017-18. The municipal revenue of Himachal Pradesh (INR 4,460 INR per capita) is the highest in the IHR states and is very close to India's average of INR 4,624 per capita. Only 9% of the total municipal revenue in Himachal Pradesh comes from property taxes collected by ULBs across the state (INR 423/ capita). Assam, on the other hand, has municipal revenue of INR 626 per capita; however, 32% i.e. INR 199 per capita, comes from f property taxes, and the same is 26% i.e. INR 145 per capita, in case of Meghalaya.

**Table 23: Details of Municipal Revenues and Property Tax (F.Y. 2017-18) of ULBs in the Hill states**

| Sr. No. | State or Union Territory | Municipal Revenue for ULBs [INR/capita] | Property Tax Revenue for ULBs | |
|---|---|---|---|---|
| | | | Absolute Value [INR/capita] | Share of Municipal Revenue[%] |
| 1 | Arunachal Pradesh | 1,476 | — | 0% |
| 2 | Assam | 626 | 199 | 32% |
| 3 | Himachal Pradesh | 4,460 | 423 | 9% |
| 4 | Jammu and Kashmir | 1,940 | – | 0% |
| 5 | Manipur | 1,166 | 4 | 0% |
| 6 | Meghalaya | 558 | 145 | 26% |
| 7 | Mizoram | 1,162 | 73 | 6% |
| 8 | Nagaland | 238 | — | 0% |
| 9 | Sikkim | 907 | — | 0% |
| 10 | Tripura | 3,593 | 46 | 1% |
| 11 | Uttarakhand | 2,897 | 156 | 5% |
| 12 | India | 4,624 | 689 | 14.9% |

*Source: ICRIER 2019*

## Municipal Revenue of ULBs

Table 24 provides the details of the municipal revenue for different types of ULBs in the states in IHR. The average municipal revenue of a municipal corporation in India is INR 5,782 per capita. Among the states in the IHR, the municipal revenue of municipal corporations is the highest in Himachal Pradesh (INR 5,821 per capita), followed by Tripura (INR 3,610 per capita).

**Table 24: Details of Municipal Revenue (F.Y. 2017-18) of different types of ULBs in the hill states**

| Sr. No. | State or Union Territory | Municipal Revenue for Municipal Corporations [INR/capita] | Municipal Revenue for Municipal Councils [INR/capita] | Municipal Revenue for Nagar Panchayats [INR/capita] |
|---|---|---|---|---|
| 1 | Arunachal Pradesh | N.A. | 1,476 | N.A. |
| 2 | Assam | 554 | 1,445 | 238 |
| 3 | Himachal Pradesh | 5,821 | 3,913 | 3,475 |
| 4 | Jammu and Kashmir | 1,928 | 1,956 | N.A. |
| 5 | Manipur | 701 | 1,525 | 1,487 |
| 6 | Meghalaya | N.A. | 558 | N.A. |
| 7 | Mizoram | 1,162 | N.A. | N.A. |
| 8 | Nagaland | N.A. | 450 | 75 |

| Sr. No. | State or Union Territory | Municipal Revenue for Municipal Corporations [INR/capita] | Municipal Revenue for Municipal Councils [INR/capita] | Municipal Revenue for Nagar Panchayats [INR/capita] |
|---|---|---|---|---|
| 9 | Sikkim | 837 | 959 | 1,171 |
| 10 | Tripura | 3,610 | 2,815 | 6,918 |
| 11 | Uttarakhand | 2,194 | 3,819 | 3,296 |
| 12 | India | 5,782 | 3,421 | 2,635 |

The average municipal revenue of India in the case of a municipal council is INR 3,421 per capita. In case of municipal councils, the municipal revenue is the highest in Himachal Pradesh (INR 3,913 per capita), followed by Uttarakhand (INR 3,819 per capita). The average municipal revenue of nagar panchayats in India is INR 2,635 per capita. In case of nagar panchayat, the municipal revenue is the highest in Tripura (INR 6,918 per capita), followed by Himachal Pradesh (INR 3,475 per capita).

Overall, it can be inferred that Himachal Pradesh and Tripura have enabling policies and taxation laws for strengthening the municipal revenues.

## Municipal Expenditure

Table 25 provides details of municipal expenditure at state level in the IHR. The expenditure is further divided into two parts – revenue expenditure and capital expenditure. The average municipal expenditure of ULBs in India is INR 3,569 per capita, out of which the contribution towards revenue expenditure is INR 2,106 per capita, and towards capital expenditure is INR 1,464 per capita.

**Table 25: Details of municipal expenditure (F.Y. 2017-18) in the states in IHR**

| Sr. No. | State or Union Territory | Expenditure for ULBs [INR/capita] | Revenue Expenditure for ULBs [INR/capita] | Capital Expenditure for ULBs [INR/capita] |
|---|---|---|---|---|
| 1 | Arunachal Pradesh | 76 | 76 | – |
| 2 | Assam | 982 | 706 | 276 |
| 3 | Himachal Pradesh | 5,335 | 2,699 | 2,637 |
| 4 | Jammu and Kashmir | 1,603 | 1,502 | 101 |
| 5 | Manipur | 821 | 315 | 506 |
| 6 | Meghalaya | 570 | 415 | 155 |
| 7 | Mizoram | 1,803 | 745 | 317 |
| 8 | Nagaland | 192 | 156 | 36 |
| 9 | Sikkim | 728 | 617 | 111 |
| 10 | Tripura | 1,706 | 1,143 | 563 |
| 11 | Uttarakhand | 2,036 | 1,151 | 885 |
| 12 | India | 3,569 | 2,106 | 1,464 |

*(Source: ICRIER 2019)*

The municipal expenditure is highest in the case of Himachal Pradesh. Except in the case of Manipur, the revenue expenditure exceeds capital expenditure. When municipal revenue in Table 23 is compared to municipal expenditure in Table 25; it is interesting to note that municipal expenditure in Assam and Mizoram is nearly 1.5 times higher than their municipal revenue in F.Y. 2017-18.


**National Institute of Urban Affairs**
1st Floor, Core 4B, India Habitat Centre, Lodhi Road, New Delhi - 110003
Phone: 011-24634971, 24643576
E-mail: niua@niua.org • Website: www.niua.in, scbp.niua.org