



# PUBLIC HEALTH ENGINEERING DEPARTMENT NAGALAND



# ANNUAL ADMINISTRATIVE REPORT 2019-20

## DEPARTMENT'S VISION STATEMENT

*“SUSTAINABLE SAFE DRINKING WATER  
SUPPLY AND ENVIRONMENTAL  
HYGIENE FOR ALL”*

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Cover Photo:- One of the lakes included in the Project- Environmental Improvement & Sustainable Conservation of Twin Lakes at Mokokchung





## INTRODUCTION

*Public Health Engineering Department was bifurcated from the erstwhile PWD and became a full-fledged Department in 1974. As per the Rules of Executive Business, the PHED is responsible for providing safe and potable drinking water supply, safe disposal of solid and liquid waste and environmental hygiene.*

*Water is best known as the elixir of life and its importance is crucial for equitable growth and development. Water being a natural resource is often left unattended and neglected. It is, however, becoming a scarce resource due to overuse and misuse. The Department has therefore, been striving to augment the existing water supply systems, regulate proper water distribution, manage water sources, implement roof top rainwater harvesting, rejuvenate traditional wells in water scarce areas and providing material and financial assistance to Water and Sanitation (WATSAN) Committees managing rural water supply systems to further the objective of providing safe, adequate and sustainable drinking water.*

*Alongside implementing drinking water supply schemes in both rural and urban areas, the Department under the Water and Sanitation Support Organization (WSSO) also implements sanitation programme and conduct seminars and workshops to educate the masses on the importance of sanitation in rural habitations to achieve Open Defecation Free status for ensuring the ultimate goal of good community health. More impetus has been given to sanitation sector with the launching of the Swachh Bharat Mission (Clean India Mission) by the Hon'ble Prime Minister of India during October 2014.*

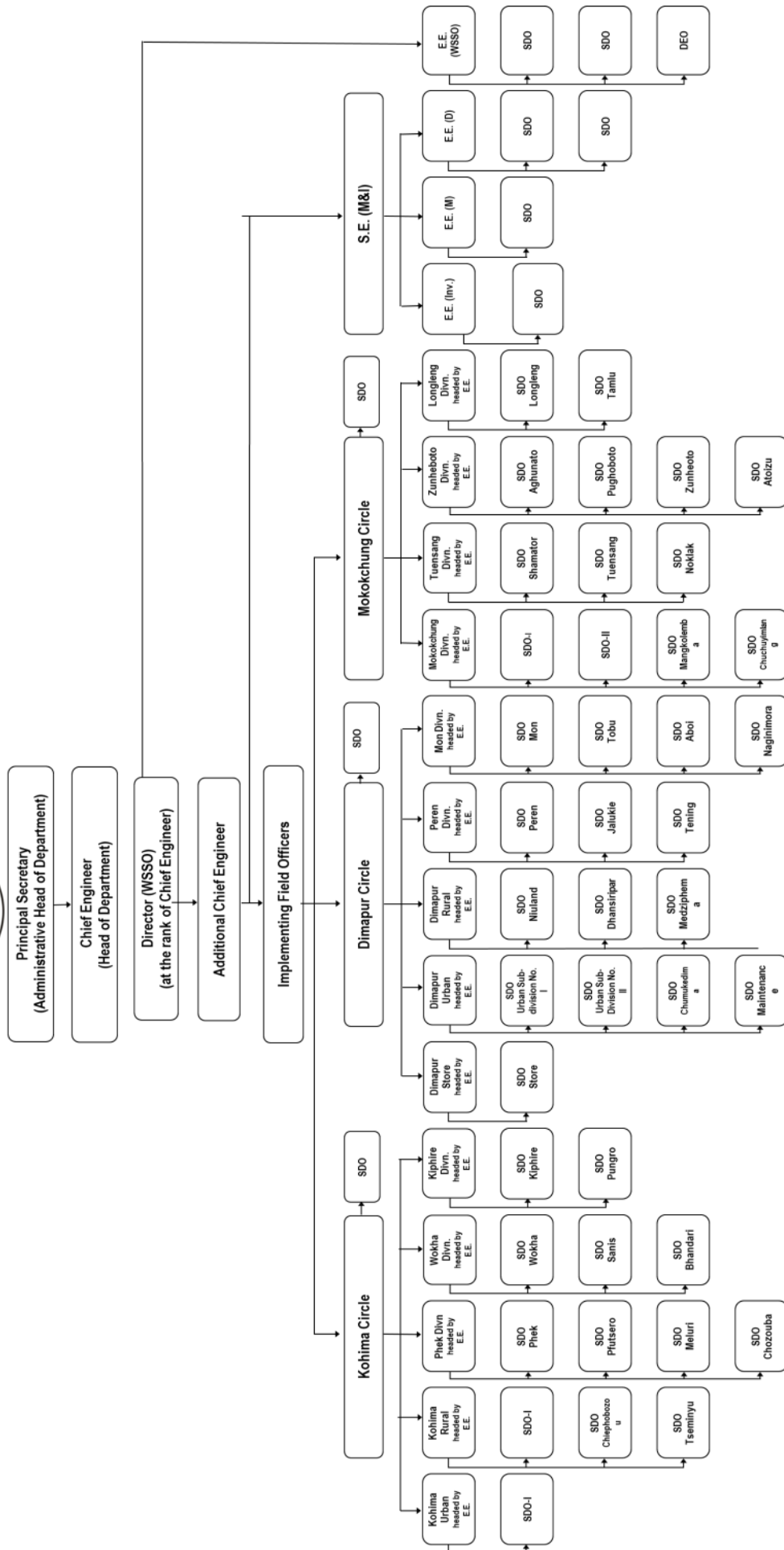
## ORGANIZATIONAL SET UP OF PHED

The Department is headed by the Principal Secretary as Administrative Head at the Government level and by a Chief Engineer at the Directorate level with 3 (three) Circles, 14 (fourteen) Divisions and 42 (forty two) Sub Divisions. The Department has a total of 1642 Regular Employees and 1506 Work Charged Employees as in February 2020 to carry out various Departmental schemes.

The Department has a centrally sponsored Water and Sanitation Support Organization (WSSO) headed by a Director, at the level of Chief Engineer, which looks after Swachh Bharat Mission (Gramin), Support Activities and Water Quality Monitoring & Surveillance (WQMS) of the National Rural Drinking Water Programme (NRDWP)/Jal Jeevan Mission (JJM).

World Water Day – 22<sup>nd</sup> March  
World Environment Day- 5<sup>th</sup> June  
Global Hand washing Day – 15<sup>th</sup> October  
World Toilet Day – 19<sup>th</sup> November  
Water Conservation Day – 19<sup>th</sup> November

# ORGANOGRAM OF NAGALAND PHED



## OVERVIEW OF ACTIVITIES OF THE DEPARTMENT

### ♦ SWACHH BHARAT MISSION (GRAMIN)

To accelerate the efforts to achieve universal sanitation coverage and to put focus on sanitation, the Prime Minister of India launched the “Swachh Bharat Mission” on 2nd October, 2014 which replaced the erstwhile Total Sanitation Campaign/ Nirmal Bharat Abhiyan. Swachh Bharat Mission (Gramin) aims to achieve Clean India by 2019, as a fitting tribute to the Father of the Nation Mahatma Gandhi on his 150<sup>th</sup> Birth Anniversary. This Mission aims at improving the level of cleanliness in rural areas through Solid and Liquid Waste Management activities and making Gram Panchayats/ villages Open Defecation Free (ODF). Nagaland was declared Open Defecation Free (ODF) on 2nd October 2018 by the Hon’ble Minister, PHED Shri Jacob Zhimomi. Under the Swachh Bharat Mission, an extension of the ODF programme “ODF Plus” has been initiated. Its objective is to sustain the ODF programme and to take up solid and liquid waste management.





## Projects Implemented under SBM(G)

### Community Sanitary Complex (CSC)

Dimapur District





## Community Sanitary Complex (CSC)

### Longleng District



### Mokokchung District



### Mon District





## Community Sanitary Complex (CSC)

### Phek District



### Kiphire District





## Projects Implemented under SBM(G)

### Solid & Liquid Waste Management (SLWM)

Dimapur District





## Projects Implemented under SBM(G)

### Individual House Hold Latrines (IHHL)

Under Department of Drinking Water and Sanitation, World Bank Assistance fund was provided to support the state in sustaining ODF status, in accordance with the SBM-G Guidelines for priority areas. The incentive fund is utilized for IHHL, CSC and SLWM works, besides other IEC Activities.









## Open Defecation Free (ODF) Board



## ♦ RURAL WATER SUPPLY

### 1. Jal Jeevan Mission (JJM) 2019-2024

The Government of India, Ministry of Jal Shakti, Department of Drinking Water & Sanitation has introduced a National Flagship Programme, Jal Jeevan Mission (JJM) by subsuming the National Rural Drinking Water Programme (NRDWP) from 2019-20. This Mission aims to provide Functional Household Tap Connection (FHTC) to every **rural** household in the country by 2024, with a minimum water supply level of 55 litres per person per day.

The PHED is taking up rural water supply schemes in 109 habitations including provision of FHTC in 27,428 households, out of which 45 habitations with 3,746 FHTCs are targeted for completion during 2019-20.

#### Status of Rural Water Supply in Nagaland as on 1<sup>st</sup> April 2019

The status of drinking water in rural areas of Nagaland comprising of 1450 villages/habitations/hamlets as on 1<sup>st</sup> April 2019 as per 55 LPCD is given below:

Sl. No.	District	Total No of Habitations	No of Fully Covered Habitations	No of Partially Covered Habitations
1	Dimapur	241	27	214
2	Kiphire	98	9	89
3	Kohima	110	22	88
4	Longleng	50	8	42
5	Mokokchung	114	11	103
6	Mon	138	20	118
7	Peren	103	24	79
8	Phek	119	48	71
9	Tuensang	133	15	118
10	Wokha	153	16	137
11	Zunheboto	191	17	174
	<b>Total</b>	<b>1450</b>	<b>217</b>	<b>1233</b>



## **SUPPORT ACTIVITIES UNDER NRDWP/JJM**

### **i) Information Education and Communication (IEC):**

The Department through WSSO and the DWSMs, has been intensifying IEC Activities on Swachh Bharat Mission and Rural Water Supply through various platforms such as NGOs, Women, Youth and Student Organizations, ASHA and Angwanwadi workers, Schools etc.

Some activities aimed at awareness creation are:

- Participatory Rural Appraisal (PRA).
- Inter Personal Communication (IPC).
- Behavioral Change Communication (BCC).
- Rallies and Campaigns.
- Workshops and Orientation programmes

The main goal of the IEC Campaign is to enable and empower the rural community to involve, have greater sense of ownership and to take more active role in shouldering the responsibility of managing effectively the water and sanitation systems in the villages. Such campaigns are expected to trigger positive behavioral changes among stakeholders with respect to hygiene, use of safe drinking water and sanitation facilities.

Some activities taken up during 2019-20 with incentive grants from World Bank are:-

- Retrofitting of selected Individual Household latrines (IHHL).
- Sanitary complexes.
- SLWM projects.
- IEC campaign using standard messages through wall paintings, installation of ODF board in all villages to generate awareness of ODF-Plus (ODF+) which includes ODF Sustainability (ODF-S).

## Information Education and Communication (IEC) Campaigns

### Kohima District



### Longleng District



### Mokokchung District





## Information Education and Communication (IEC) Campaigns

### Dimapur District



### Phek District





## Information Education and Communication (IEC) Campaigns Wokha District



## Mon District





## Information Education and Communication (IEC) Campaigns

### Kiphire District



### Peren District



### Tuensang District



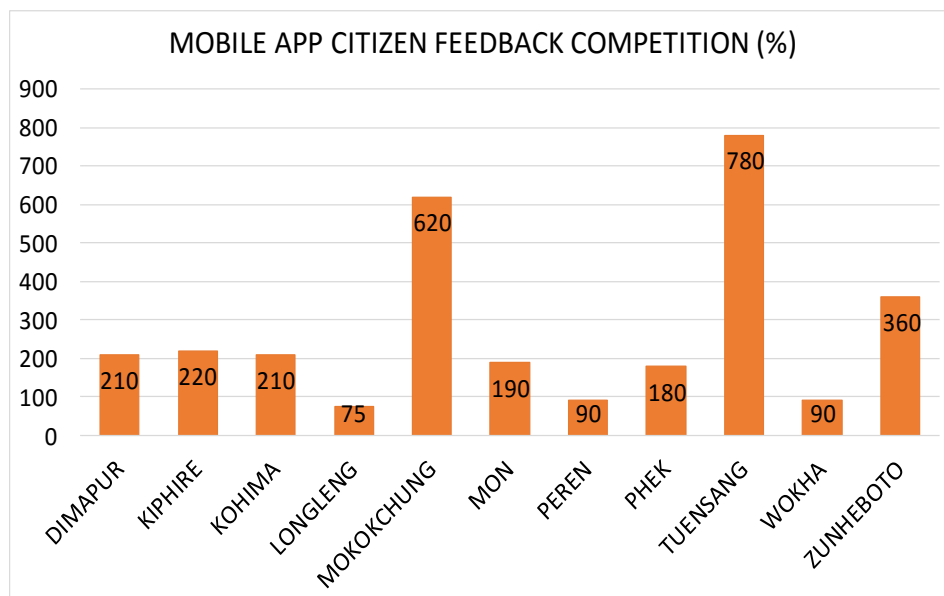


### Some activities conducted by WSSO/DWSM PHED

A 6-member team of Swachhagrahis from Nagaland attended “Swachh Shakti 2019” event on the 14<sup>th</sup> February, 2019 at Kurukshetra, Haryana



“Swachh Survekshan Grameen- 2019 (SSG, 2019)” - ranking of districts on their rural sanitation status based on a comprehensive set of quantitative and qualitative sanitation (Swachhata) parameters was carried out in all the eleven Districts of Nagaland.



## SWACHH SURVEKSHAN GRAMEEN(SSG) - 2019

### Kohima District



### Wokha District



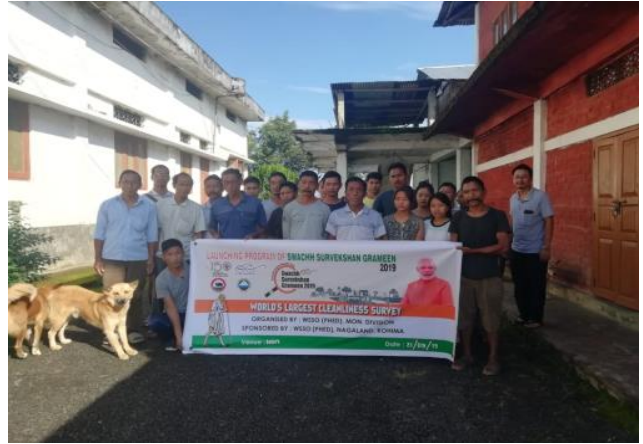


## SWACHH SURVEKSHAN GRAMEEN(SSG) - 2019-20

### Tuensang District



### Mon District



A team of 9 Swachhagrahis from Nagaland attended the commemoration of Mahatma Gandhi's 150<sup>th</sup> birth Anniversary on 2nd October 2019, through "Swachh Bharat Divas" at Sabarmati, Gujarat.



## Swachhta Hi Seva (SHS) 2019 Campaign

Swachhta Hi Seva (SHS) 2019 Campaign was launched at the State level in collaboration with the Department of Urban Development on 11<sup>th</sup> September, 2019. This campaign ran from 11<sup>th</sup> September to 27<sup>th</sup> October 2019 in all the districts of Nagaland to generate awareness on Plastic Waste and its management.

Plastic Waste Shramdaan was observed across the State with the main focus on plastic waste collection, disposal of collected plastic through recycling / consumption as fuel by industries.





## Swachhta Hi Seva (SHS) 2019 Campaign

### Dimapur District





## Swachhta Hi Seva (SHS) 2019 Campaign

### Dimapur District





## Swachhta Hi Seva (SHS) 2019 Campaign

### Longleng District





## Swachhta Hi Seva (SHS) 2019 Campaign

### Mon District



### Peren District





## Swachhta Hi Seva (SHS) 2019 Campaign

### Phek District





## Swachhta Hi Seva (SHS) 2019 Campaign

### Wokha District



### Kohima District



### Mokokchung District





## Swachhta Hi Seva (SHS) 2019 Campaign

### Tuensang District



### Kiphire District





Global Hand Washing Day, World Toilet Day and other National and International programmes pertaining to water and sanitation are observed across the State bringing a wider platform to create awareness and effective participation of the communities.

### Kohima District



### Kiphire District





## Peren District



## Wokha District





## Phek District



## Longleng District



## ii) Human Resource Development :

WSSO and District Water and Sanitation Missions (DWSMs) conducted Trainings, Workshops and Orientation programmes for WATSAN Committee, VWSCs, Nigrani Samithi, Swachhagrahis, NGOs, Women, Youth, Students, ASHA and Anganwadi workers. The key messages were Good Sanitary practices viz. hand-washing, personal hygiene, community hygiene etc, risk of Open Defecation and the benefits of toilet use, safe handling of water and water conservation to accelerate capacity for effective implementation of various water and sanitation programmes.

### GENDER BUDGETING:

- \* The department encourages participation of women in planning and management of rural water supply and sanitation programmes.
- \* Involvement and participation of womenfolk and women NGOs in awareness campaigns since they are the most affected section in society in matters concerning water and sanitation.
- \* By providing drinking water and sanitation facilities through various programmes and plans, quality of life of women in many rural habitations are improved. They no longer need to walk long distances to fetch water and are in a better position to devote more time to other activities.



## iii) Integrated Management Information System (IMIS)

The Department has an Integrated Management Information System (IMIS), sponsored by the Ministry of Jal Shakti, Department of Drinking Water and Sanitation, Government of India, through which the Ministry monitor all centrally sponsored programmes. Online submission and monitoring of physical & financial progress reports, completion reports, updating information & data relating to water supply and sanitation, and correspondence with the Ministry are performed by IMIS Section.



## ♦ WATER QUALITY MONITORING AND SURVEILLANCE UNDER NRDWP /JJM:

Recognizing the importance and urgency of addressing drinking water quality problems in the country, the Govt. of India is addressing the problem in an ambitious way, especially with the ultimate objective of institutionalizing community participation in all rural habitations in water quality monitoring and surveillance. 3% of JJM fund is earmarked for Water Quality Monitoring & Surveillance (WQMS) to ensure quality of water for which village level functionaries are trained on water quality aspects-sampling, testing and monitoring to ensure safe drinking water at all times.

The emphasis of WQMS is on regular testing and documentation of water sample to monitor water quality and take preventive and remedial measures which would prevent outbreak of water borne diseases.

Normally water samples are tested twice in a year for Bacteriological and once for Chemical contamination.





## ◆ URBAN WATER SUPPLY

Urban water supply schemes taken up by the Department are funded by various Central Government Ministries such as Ministry of Housing and Urban Affairs, DoNER and also with state fund.

### i) Augmentation of Water supply to Kohima Town:

The scheme for Augmentation of Water Supply to the State capital, Kohima, is being taken up under 90:10 funding under the Ministry of Urban Development, Govt. of India. The project involves pumping of water from Zariü stream to a reservoir at Kigwema Village through two stages of pumping. From this reservoir, water will be supplied to the State capital by gravity. The design capacity of the project is 3.80 million litres daily. The main infrastructures have been completed and the distribution system is under execution. The Project is targeted for completion during the year 2019-20.



Pumping Mains



Variable Frequency Drive (VFD) under installation



**ii) Providing Water supply to New Secretariat Area (Phegei) Kohima**

In order to meet the water demand of this new colony where many public dwellings and businesses have been setup, a water supply scheme was taken up during 2012-13 under State Plan Sector with an estimated cost of ₹ 249.00 lakh . The upto date expenditure as of March 2019 for this project is ₹ 210.51 lakh with a physical progress of 85 %. The Project is targeted for completion during 2019-20.

**iii) Augmentation of water supply to Zunheboto Town- Phase II (Commenced from 2016-17).**

The Scheme for Augmentation of Water Supply to Zunheboto Town Phase-II was taken up under State plan during the year 2016-17 with an estimated cost of ₹ 1658.13 lakh. Out of this approved cost, HUDCO provided a loan of ₹ 500 lakh during 2016-17. The up-to date expenditure as on March 2019 is ₹ 520.00 lakh with a Physical Progress as of February 2019 is 38%.

**iv) BUILDING PROGRAMME UNDER STATE PLAN**

Construction of office building for the Superintending Engineer, PHED at Dimapur; and for the Executive Engineer, PHED at Mon town are in progress under State Plan.



## ♦ PROJECTS FUNDED BY OTHER MINISTRIES/ AGENCIES

### i) **Water supply scheme for 24 villages of Chiephobozou R.D. Block (NLCPR):**

With an approved cost of ₹ 2626.41 lakh, the project is intended to provide drinking water supply to one of the most water scarce blocks in Nagaland. The Project was initially sanctioned during 2009-10 and revised during the year 2010-11.

### ii) **Providing Water Supply to Mon village and four surrounding villages- Lempong Sheangha, Phuktong, Tuimai and Leangnyu in Mon district (under NLCPR):**

This project was sanctioned during 2015-16 for an estimated cost of ₹ 1546.67 lakh by the Ministry of DoNER . The physical progress is 85 % and is targeted for completion during the year 2019-20.

### iii) **Providing Water Supply to Samzuiram Village at Peren District (NLCPR):**

The Project was sanctioned during the year 2017-18 for an estimated cost of ₹ 1893.16 lakh. The project is under execution and anticipated expenditure upto March 2020 is ₹ 870.85 lakh.

### iv) **Providing Water Supply by gravity to Aboi HQ and Longching EAC HQ at Mon District (under NLCPR).**

The Project was sanctioned during the year 2017-18 for an estimated cost of ₹ 965.98 lakh. The project is under execution and anticipated expenditure upto March 2020 is ₹ 444.35 lakh during 2019-20.



**V. Providing water supply to Akuk old Village by pumping in Wokha district (NEC):**

The project was sanctioned during the year 2013-14 for an estimated cost of ₹ 285.22 lakh. This project is completed and is targeted for commission in February 2020.



**vi) Augmentation of water supply scheme through stream water sources in Japukong Range, covering 5(five) villages under Mokokchung district (NEC):**

The project was sanctioned during the year 2013-14 for an estimated cost of ₹ 484.74 lakh. Financial progress is 100% and is targeted for commission within 2019-20.



Sedimentation Tank at Lirmen Village



Slow Sand Filter at Lirmen Village

**♦ COMMUNITIZATION**

Communitization Programme for Rural Water Supply and Sanitation System started in 2003, under the Communitization of Public Institutions and Services Act, 2002 (Act No. 2 of 2002) of Government of Nagaland. This policy is in line with the Sector Reforms Programme of the Ministry of Drinking Water & Sanitation, Govt. of India.

WATSAN Committee is the beneficiaries' 'legal agency' and is constituted by the Village Council. WATSAN Committee is formally recognized and empowered by way of signing a Memorandum of Understanding (MoU) with the PHED. The WATSAN Committees participate in planning, design, implementation and subsequent take-over of the completed scheme for operation and maintenance (O&M). A total of 1215 or 79 % of the total number of habitations have so far been brought under the ambit of Communitization.



## ◆ URBAN SEWERAGE AND SANITATION

The department is implementing a project at Dimapur town for pollution abatement of rivers Diphu and Dhansiri. The objective of the project is to reduce the pollution levels of the rivers caused due to discharge of raw sewage from households. The targeted intervention is to collect sewage from households through a system of sewers to a STP (Sewage Treatment Plant), thereby reducing the pollution level to an acceptable level.



Public Utility

The estimated cost of project was revised in 2013-14 out of which ₹ 82.8 crore has been approved.

Physical progress is 45% as of date



Laying of main sewers

## ♦ ENVIRONMENTAL IMPROVEMENT & SUSTAINABLE CONSERVATION OF TWIN LAKES IN MOKOKCHUNG

The Scheme for conservation of Twin Lakes, namely Amok Lushi (under Chuchuyimpang village) and Yimdong Awatsung (under Mokokchung village), was sanctioned for ₹ 25.83 crore by the Ministry of Environment, Forests & Climate Change, Govt. of India under the National Lake Conservation Plan. The anticipated expenditure up to March 2020 is ₹ 2396.14 lakh and physical progress is 65%.

These two lakes, which are perhaps the only large natural water bodies near Mokokchung town, are highly polluted due to dumping of wastes and discharge of untreated liquid waste from the surrounding houses. The project objective is to conserve the lakes which can be sources of drinking water as well as for recreational activities such as angling and boating.





## ♦ REVENUE COLLECTION

The Department generates revenue by way of water fees from registered water consumers, mostly from urban areas of the State. Water fees from rural water consumers are collected by the WATSAN Committees which augment the internal resources of the Committees for O&M of the village water and sanitation facilities, and therefore, do not contribute to the Department revenue. The Department is striving to improve the service delivery and increase the quantum of water availability in urban water supply schemes through better O&M.

Year	Revenue realized (Rs in lakh)
2014-15	192.80
2015-16	240.16
2016-17	261.44
2017-18	283.56
2018-19	265.97
2019-20 upto Dec 2019	168.55

### MEASURES FOR MOBILIZATION OF WATER REVENUE

- Verification of water revenue collection system in major urban towns by Department appointed Revenue Review Teams. Findings and suggestions of the teams help improve revenue collection system and service delivery to water consumers.
- Identification of unauthorized pipe connections, tampering of water pipes and pilferage of water by unauthorized connections, when detected, are registered and are served with water bills. Efforts are on to plug tampering of pipes and water pilferage with the support of local ward authorities.
- Commercial establishments such as hotels, restaurants, private schools, private clinics etc. which are registered as Domestic Consumers are brought under Commercial Consumer category.
- Employees in-charge of water distribution system and revenue sections are sensitized on the importance of delivering better services to the consumers.
- Introduction of water metering system for rationalization of water usage and billing

### ♦ WATER SUPPLY CONSUMERS RULES, PROCEDURES AND TARIFFS

The Department follows the Nagaland Water Supply Consumer Rules 1998, the rates of which have been revised w.e.f. 9<sup>th</sup> April / 2010 as under:

Sl. No	Item	Unit	Rate w.e.f. 01.04.2010 ( in Rupees)
1	Cost of application & MoU formats	1 No.	20.00
2	Application fee for new normal connection	1 No.	100.00
3	Application fee for temporary connection	1 No.	150.00
4	Reconnection application fee for defaulters	1 No.	50.00
5	Reconnection charges for defaulters	1 No.	250.00
6	Security deposit (refundable)	1 No.	1000.00
7(a)	Water charges for metering system		
	Domestic use	1000 litres	50.00
	Commercial use	1000 litres	100.00
	Industrial use	1000 litres	150.00
	Meter fee PM	1 No.	30.00
7(b)	Non metering system		
	Domestic consumer	1 Point	100.00
	Commercial consumer	1 Point	350.00
	Industrial consumer	1 Point	500.00
8	Penalty for late payment of bills	2 <sup>nd</sup> Month 3 <sup>rd</sup> Month	10% of arrear 25% of arrear
9	Reservoir 2000 litres provided	1 No.	200.00
10	Meter Testing fee	1 time	50.00

Application for new connections from interested consumers can be submitted in the form prescribed by the Department. The Department shall supply the application form along with the Agreement form on a written request duly accompanied by a sum of Rs 20/- (Rupees Twenty) only addressed to the Executive Engineer concerned.



#### ◆ IMPLEMENTATION OF RTI ACT 2005

With the introduction of the Right to Information Act 2005 (Central Act No. 22 of 2005), the Government has designated the following officers as (i) Public Information Officer (ii) Appellate Authority for performing functions under the said Act in respect of information under the control of the Public Health Engineering Department, Government of Nagaland (Notification No.PHE-2/WORKS/45/2005 Dated 21/11/2005).

Sl. no.	Division	Appellate Authority
a.	Kohima PHE Urban Division	Executive Engineer
b.	Kohima PHE Rural Division	Executive Engineer
c.	Dimapur PHE Urban Division	Executive Engineer
d.	Dimapur PHE Rural Division	Executive Engineer
e.	Peren PHE Division	Executive Engineer
f.	Kiphire PHE Division	Executive Engineer
g.	Mon PHE Division	Executive Engineer
h.	Tuensang PHE Division	Executive Engineer
i.	Zunheboto PHE Division	Executive Engineer
j.	Wokha PHE Division	Executive Engineer
k.	Phek PHE Division	Executive Engineer
l.	Mokokchung PHE Division	Executive Engineer
m.	Longleng PHE Division	Executive Engineer

**Appellate Authority:**  
Superintending Engineer of respective Circles

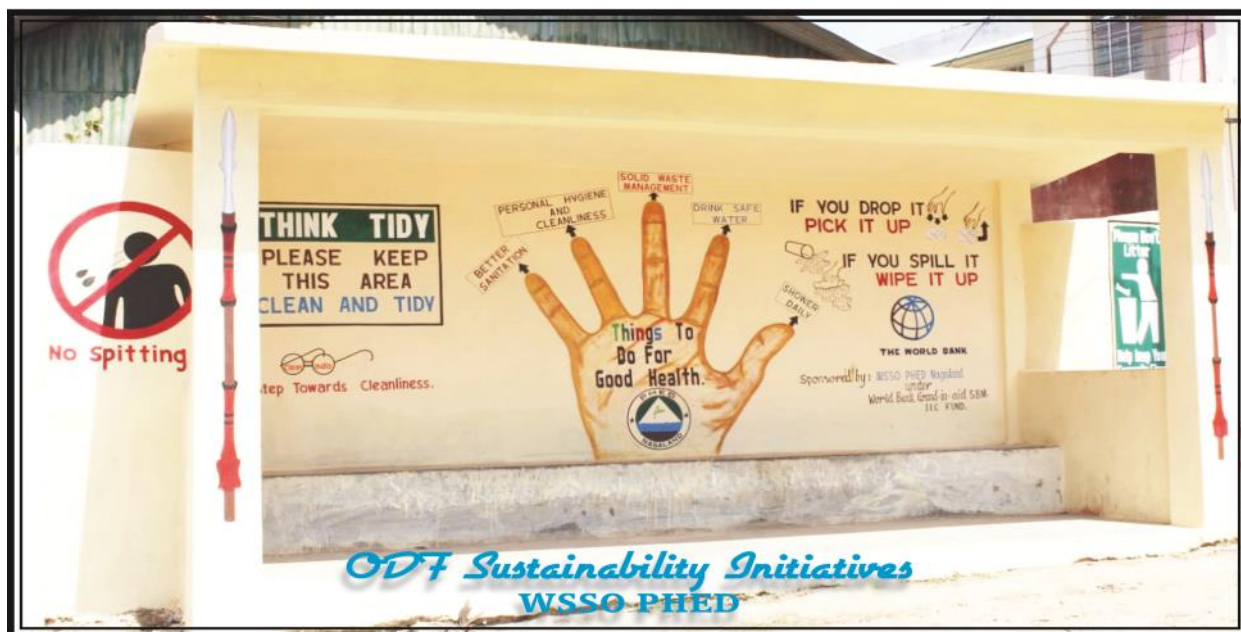
**For Directorate level information:**  
Addl. Chief Engineer, PHED

**Appellate Authority:**  
Chief Engineer, PHED

**For Secretariat level information:**  
Joint Secretary, PHED

**Appellate Authority:**  
Secretary, PHED

Sl.	Particulars	Total numbers
1	Total number of RTI applications received	54
2	Number of RTI applications disposed	51
3	Number of RTI applications withdrawn	3
4	Number of RTI applications under process	1
5	No of RTI replies yet to be collected by the applicants	2







## **Swachhta Hi Seva at Mokokchung**

**Office of the Chief Engineer  
Public Health Engineering Department  
New Secretariat area, near Naga Solidarity Park,  
Nagaland, Kohima-797004  
Website: [www.phed.nagaland.gov.in](http://www.phed.nagaland.gov.in)  
Email: [cephed-ngl@nic.in](mailto:cephed-ngl@nic.in)**