

# STATE ENVIRONMENT PLAN FOR SIKKIM



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## State Environment Plan [*Sikkim*]

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## STATE PROFILE

Sikkim is the 2<sup>nd</sup> smallest and the least populous 22<sup>nd</sup> state of India covering a geographical area of 7096 sq.km, extending approximately 114 kms from north to south and 64 kms from east to west. Sikkim ranks 27<sup>th</sup> in terms of area coverage and its density is 86 per sq km which is lower than national average 382 per sq km. It is a landlocked state in the north-eastern region of India and shares international borders with China, Nepal and Bhutan, and state boundary with West Bengal. The state falls in the 1.4 Meso Regions, namely North Eastern Himalayas of the Macro Region 1, the Northern Mountains of the Natural Division of India. It includes four micro regions i.e., 1.4.1, 1.4.2, 1.4.3 and 1.4.4 and lies between latitude of 27°5' N to 20°9' N and longitude of 87°59' E to 88°56' E (the state being in the inner Eastern Himalayan Mountain region), the elevation of the mountainous terrain ranges from 280 meters above sea level (asl) to 8585 meters asl; and has the third highest peak in the world located in the northern part of Sikkim Himalaya, the Mount Khangchendzonga. Nearly two third of the hilly regions of the state are montane perpetually covered with snow and are the sources of glaciers like Talung, Zemu, Lhonak, etc.

Owing to its location in the Himalayan mountain regions, the topography of Sikkim is diverse with an array of ecological variations of different climatic conditions from warm tropical in the south to the cold desert in the north which determines the varied vegetation patterns. The rich diversity and its elegant beauty of flora and fauna, waterfalls, lakes, holy caves, hot springs make the state as one of the biodiversity hotspots in the Eastern Himalayas. These water bodies especially the lakes of high altitude are the transitory halting habitats of a large groups of migratory waterfowls.

### a. State Administrative Set-up Profile

The district administration of Sikkim is setup in 6 districts as a result of the Sikkim (Re-organization of Districts) Act, 2021 – Gangtok, Pakyong, Mangan, Namchi, Soreng and Geyzing. Each of these districts is headed by a State Government appointee, the District Collector, who oversees the overall administration of civilian areas of the district and coordinates the functioning of all other state government departments and PSUs within the district. The District Collector is supported by Additional District Collector. Sub-divisional Officers are the supporting and the heads of respective departments. The office of District Collector & Magistrate is known as District Administrative Centre (DAC) or District Collectorate.

Gangtok district of Sikkim has been divided into 2 Sub-Divisions namely Gangtok and Rabdang. Gangtok district is an administrative district of the Indian state of Sikkim as all the major offices of the administration of the state is located in Gangtok. Both the District Collectorate and the office of SDM are situated at Sichey area of Gangtok. However, because of the decentralization policy of the State Government, the sub-district units were further divided into smaller units called Block Administrative Centre (BAC) vide Notification No. 628/RM&DD/P, dated 12.2.2007. The newly created Block Administrative Centers (BACs) are declared as the “grassroots unit” of developmental activities of the state and their territorial jurisdictions are fixed vide Notification No. 60/RM&DD/P, dated 20.02.2007 superseding earlier Notifications of 12.2.2007. Previously there were only 08 BACs which are later on extended to 10.

For the administrative purpose, 3 subdivisions make up the new Pakyong district in East Sikkim: Rongli, Rangpo and Pakyong. With six revenue circles – Pakyong, Dikling – Pacheykhani, Aho Senti, Tareything-Bering, Machong and Amba Taza- It is the largest subdivision. The Rongli subdivision will comprise Rhenock, Subaneydara and Rongli revenue circles. Duga and West Pandam are two revenue circles that comprise the Rangpo Subdivision.

The Soreng District with its head quarter at Soreng is headed by the District collector who is in charge of the overall administration of the district and co-ordinates the functioning of all other state government department departments and PSUs within the district. The office of the District collector has several sections which are supervised by various officers of the rank of Sub-Divisional Magistrates and Deputy Director. The District collector is supported by the Additional District Collector who looks after certain sections of the Collectorate.

Geyzing district is also known as Gyalshing. The town is connected to the capital Gangtok by a metalled road. Geyzing is also connected to the West Bengal towns of Darjeeling and Kalimpong via Jorethang. its head quarter at Gyalshing is headed by the District collector who is in charge of the overall administration of the district and co-ordinates the functioning of all other state government department departments and PSUs within the district. The office of the District collector has several sections which are supervised by various officers of the rank of Sub-Divisional Magistrates and Deputy Director. The district collector is supported by the Additional District Collector who looks after certain sections of the Collectors.

Mangan district is divided into 4 subdivisions: Mangan, Dzongu, Kabi and Chungthang and also 5 Nagar Palika under Mangan Nagar Panchayat (MNP). These are : Lower Mangan Bazaar, Power Colony, Rinzing Namgyal, Penktok, Upper Mangan Bazaar.

The Namchi District with its head quarter at Namchi is headed by the District collector who is in charge of the overall administration of the district and co-ordinates the functioning of all other state government department departments and PSUs within the district. The office of the District collector has several sections which are supervised by various officers of the rank of Sub-Divisional Magistrates and Deputy Director. The district collector is supported by the Additional District Collector who looks after certain sections of the Collectors.

## **b. Urban Local Bodies**

Sikkim has 7 Urban Local Bodies (ULBs) which has been constituted since 2010 – 2011 under Sikkim Municipalities Act 2007 in the towns of Gangtok, Rangpo, Singtam (Gangtok Municipal Corporation, Rangpo Nagar Panchayat and Singtam Nagar Panchayat in East district), Mangan (Mangan Nagar Panchayat in North district), Gyalshing (Geyzing Nagar Panchayat in West district), Nayabazaar – Jorethang (Nayabazaar – Jorethang Nagar Panchayat) and Namchi (Namchi Municipal Council in South district). These ULBs are primarily responsible for the management of municipal solid waste management (MSW).

At present, 89% source segregation of MSW have been achieved so far through training and IEC activities at cluster / ward wise phased manner by the ULBs. Separate bins are being provided to residents for source segregation by ULBs. The segregated wastes collected thereafter are being taken to the landfill where degradable items are being used for composting and non-degradable items are being recycled through scrap dealers and remaining inert waste are disposed at landfill. Gangtok

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Municipal Corporation and Mangan Nagar Panchayat are composting their partial amount of bio-degradable waste within the ULBs itself. A hundred percent door-to-door collection of waste has been achieved in all the 7 ULBs. In North district, under Mangan Nagar Panchayat, all the vegetable waste of the marketing center is being into compost through Organic Waste Converter that has been installed by the ULB. MSW from south and west districts is also being collected and sent to scientific landfill under construction at Sipsu in West district.

### **c. Natural Resources**

The state is bestowed with abundant a natural resource that makes Sikkim a biodiversity hotspot and the UNESCO World Heritage Site. Forest is one of the richest natural resources of Sikkim and forestry is the major land use in the state of Sikkim. Sikkim is rich in biodiversity and is endowed with 26% of flowering plants found in the country i.e., over 4500 flowering species of which more than 400 are identified medicinal plants, 500 orchid varieties, 450 species of trees of which 11 species are Oak, and 39 species of Rhododendron. Sikkim has 150 species of mammals, 550 species of birds, 650 species of butterflies and moths. Of these 19 species of mammals, 11 species of birds and 65 species of plants are threatened and endangered. Conservation of these species and their habitat warrants special attention in the State, especially in the context of climate change. About 72% of the Indian species of Rhododendrons are found here and hence Sikkim is called the cradle of Indian Rhododendrons. Sikkim also harbors an enormous amount of medicinal and rare, endemic and threatened (RET) species from the humid river valleys to the cold trans-Himalayan regions. Being rich in biodiversity, Sikkim also has cultivated cash crops, such as the medicinal plants which are indigenous to this region, exotic orchids, the Sikkim big cardamom, Sikkim mandarin, and livestock products such as milk and cheese. Changes in climate pose a threat to the production and productivity of these cash crops and livestock products, which are significant from the point of view of the livelihoods it provides to the people. Livestock sector in the state also contributes towards high income generation along with the agriculture contributing about 15.36% of the total geographical area of the state. Fisheries are important areas of natural economic activity enabling the rural people to derive an additional income to improve the livelihood.

Other resources are water resources, human resources, livestock resources, hydro-electric potential, tourism, agricultural, horticulture etc. In forest, non-wood forest produce has a vast potential like sand, boulders and other materials. Under economic geology the minerals like copper, iron, lime, dolomite/limestone, coal, quartzite and tale, silicate & graphite are available in the state. Garnet is abundant in the gneiss and mica schists at places. Large cardamoms production is very high in the state. The basic information on various natural resources is either not available or if available it is not adequate and up to date. There is a vast potential for hydro-electric power generation. Tourism development deserves consideration to add to the economy of the region.

Sikkim has a wide network of stream and rivers which are well distributed throughout the state. Rately Chu is a river in Sikkim that is the main source of water for the state capital, Gangtok. Rately Chu emerges from the glacier-fed lake Tamze at an elevation of 3,800 metres (12,500 ft) above sea level. Rately Chu is tapped for drinking water at an elevation of 2,500 metres (8,200 ft). From this tapping point or water supply head work, water is transported for 17 kilometres (11 mi) to the Selep Water Treatment Plant site. The Rangeet and Teesta rivers are the main channels of drainage originating from Zemu glacier in the north and Rathong glacier in the north respectively. Rangeet joins the Teesta River in the south and forms tributaries of Hongbo chu, Poke chu, Umran chu, Dikchu, Rangphap chu, Rongni chu and Rongpo chu. River Teesta flows from north to south. River Rangeet originates from Rathong Glacier which also flows north to south and then after west to east direction. Kayam chhu, Rongdung chhu, Relli chhu, Rathang chhu, Kalej khola, Rishi khola, Ramam khola are the important tributaries of river Rangeet. The river Rangeet with its deep green and crystal-clear water gushes in and meets the forceful mountain stream Teesta at a point called Triveni

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between Teesta at a point called Triveni between Teesta bazar and Melli bazar. The water bodies have cultural, religious, ecological significance and are one of the most important wetland and bird area of Sikkim.

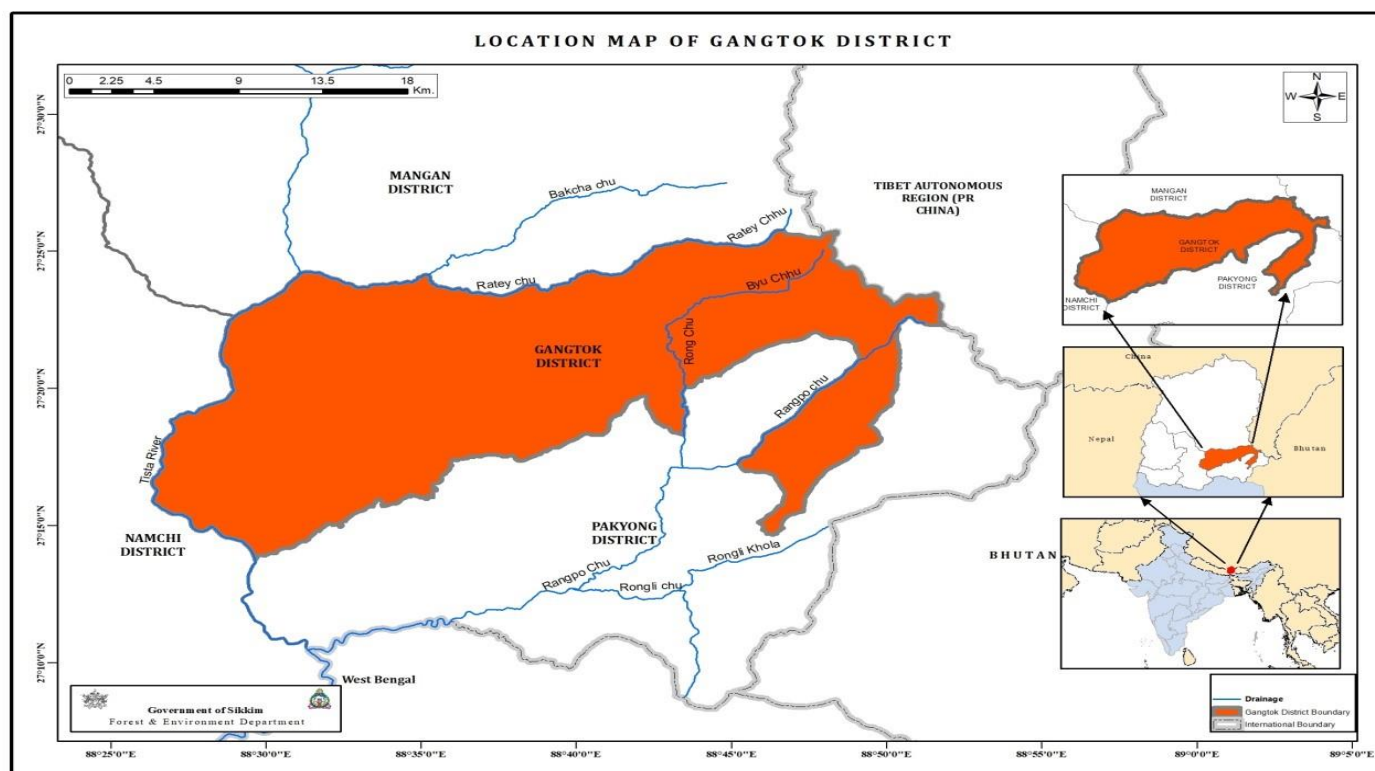


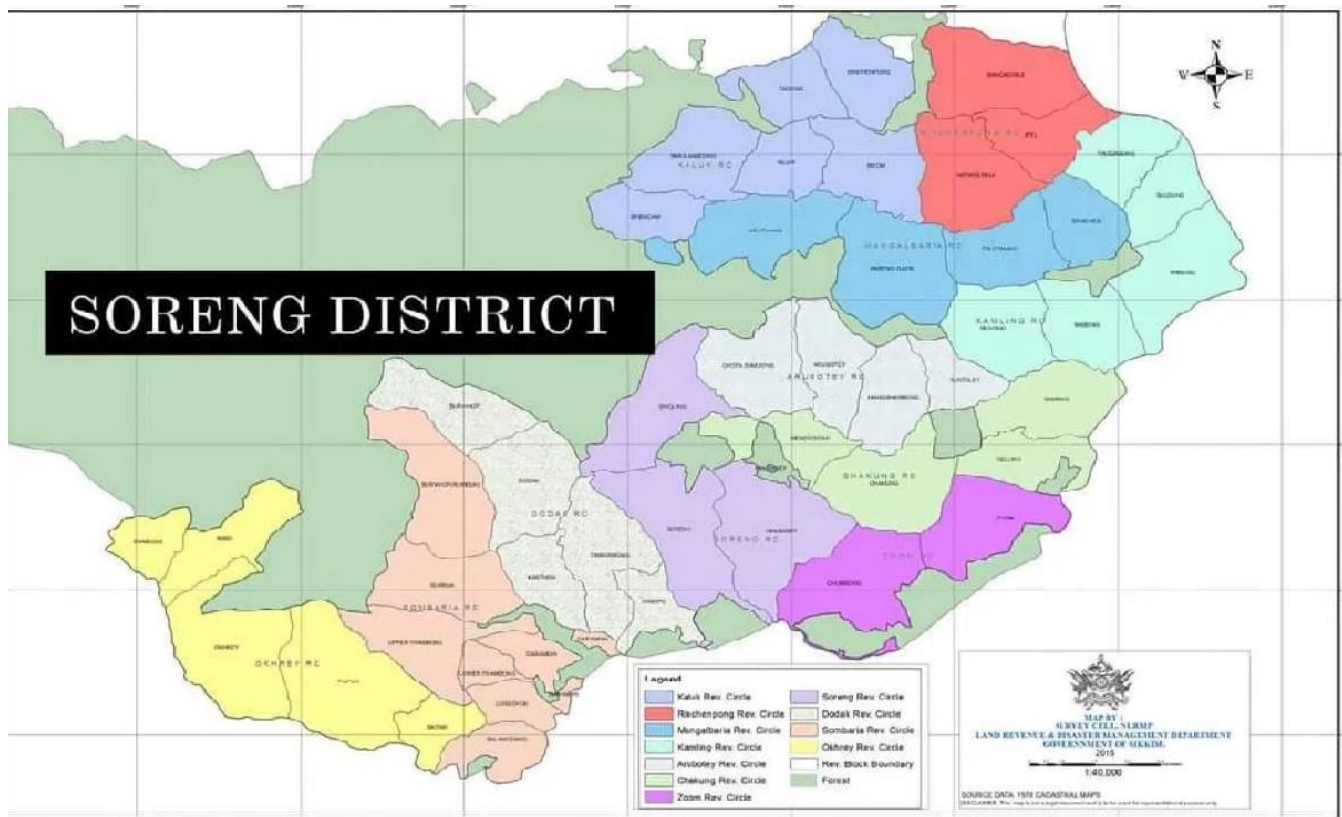
**d. Geography and Demography**

**Distribution of population in rural and urban areas**

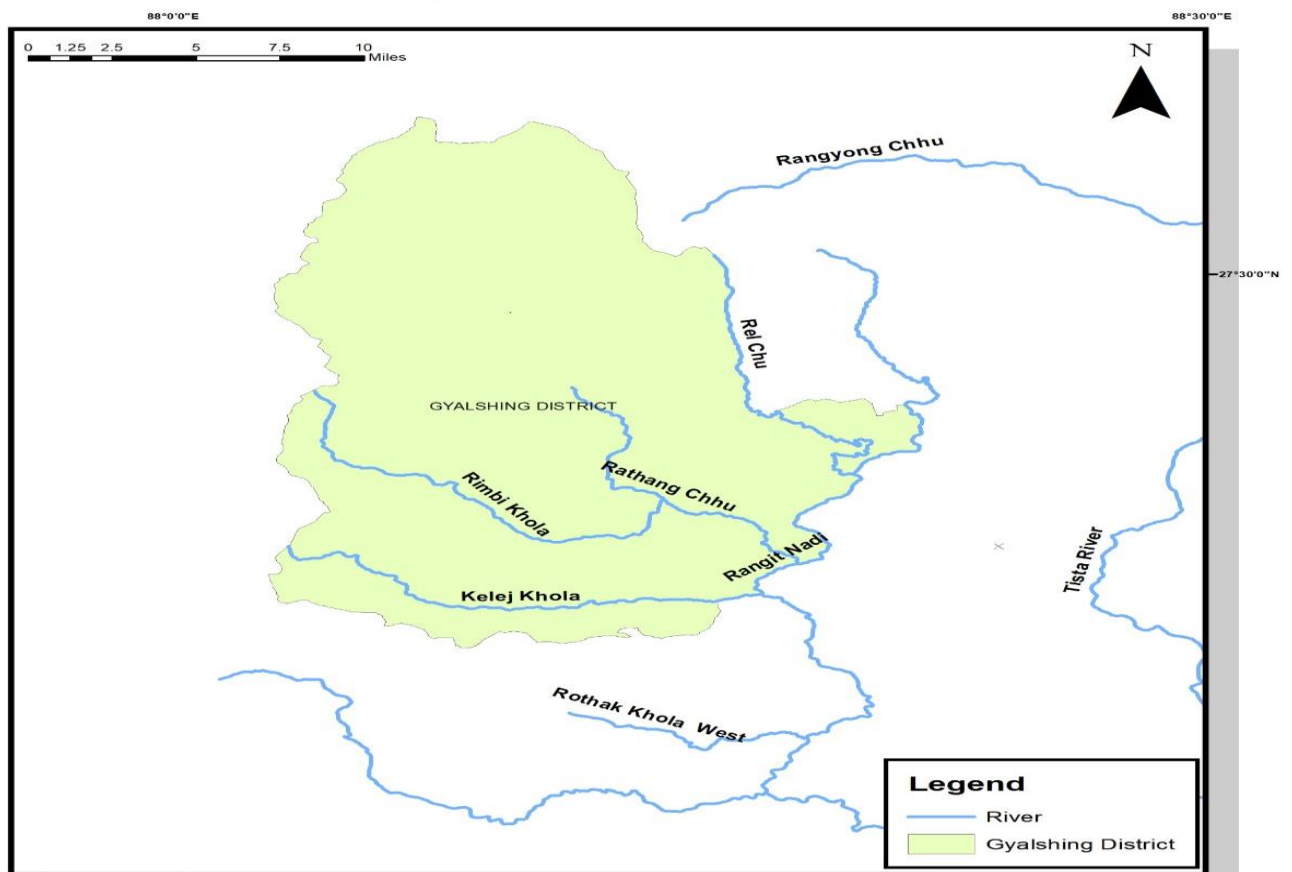
**Table below shows decadal change in population for Sikkim**

S.No.		Gangtok	Pakyong	Mangan	Namchi	Soreng	Gyalshing	Total
1.	<b>Area</b>	954 Sq/Km	404 Sq/Km	4226 Sq/Km	750 Sq/Km	293.2 Sq/Km	-	7096 Sq/Km
2.	<b>Population</b>	283583	74583	43709	146850	64760	71675	685160
3.	<b>Rural Population</b>	-	-	39065	125651	63525	-	228241
4.	<b>Urban Population</b>	-	-	4644	21199	1235	-	27078
5.	<b>Decadal Growth Rate</b>	-	-	-	-	10.69%	-	-
6.	<b>Decadal Variation in Urban Population</b>	-	-	-	-	187.72%	-	-
7.	<b>Decadal Variation in Rural Population</b>	-	-	-	-	8.03%	-	-
8.	<b>Sex Ratio</b>	872 females for every 1000 males	-	767 females for every 1000 males	915 females for every 1000 males	971 females for every 1000 males	-	-
9.	<b>Scheduled Caste Population</b>	-	-	982	-	2544	-	-
10.	<b>Scheduled Tribe Population</b>	-	-	28715	-	25970	-	-
11.	<b>Literacy Rate</b>	84.67%	69.86%	78.01%	81.4%	77.68%	-	-





**GYALSHING DISTRICT MAP**

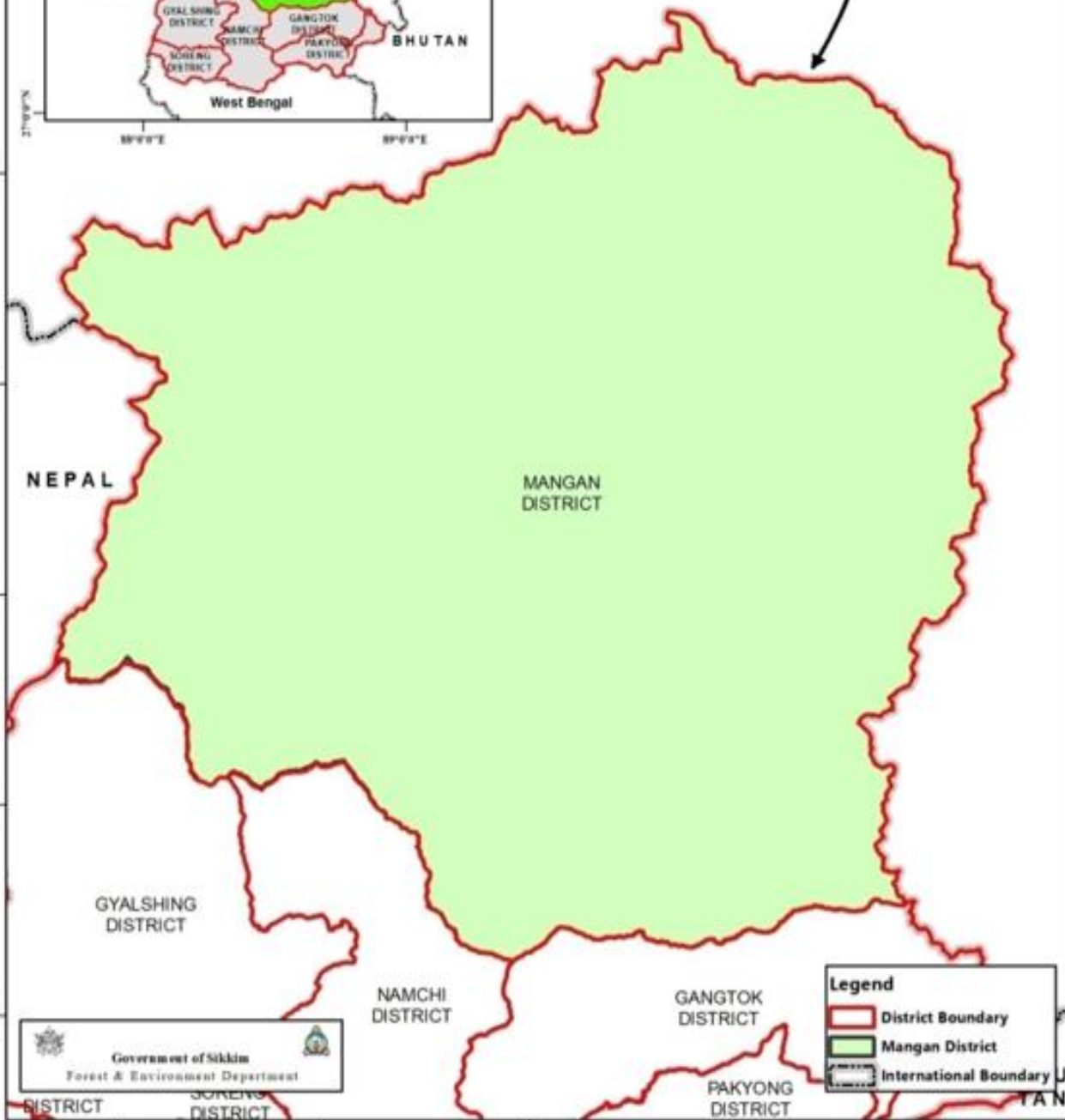


### LOCATION MAP OF MANGAN DISTRICT

Map Prepared by: RS/GIS Cell, Working Plan Circle, FED, Sikkim  
Vide SI No.: 244/GISWP21/FED.



28°30'N  
28°30'N  
28°30'N  
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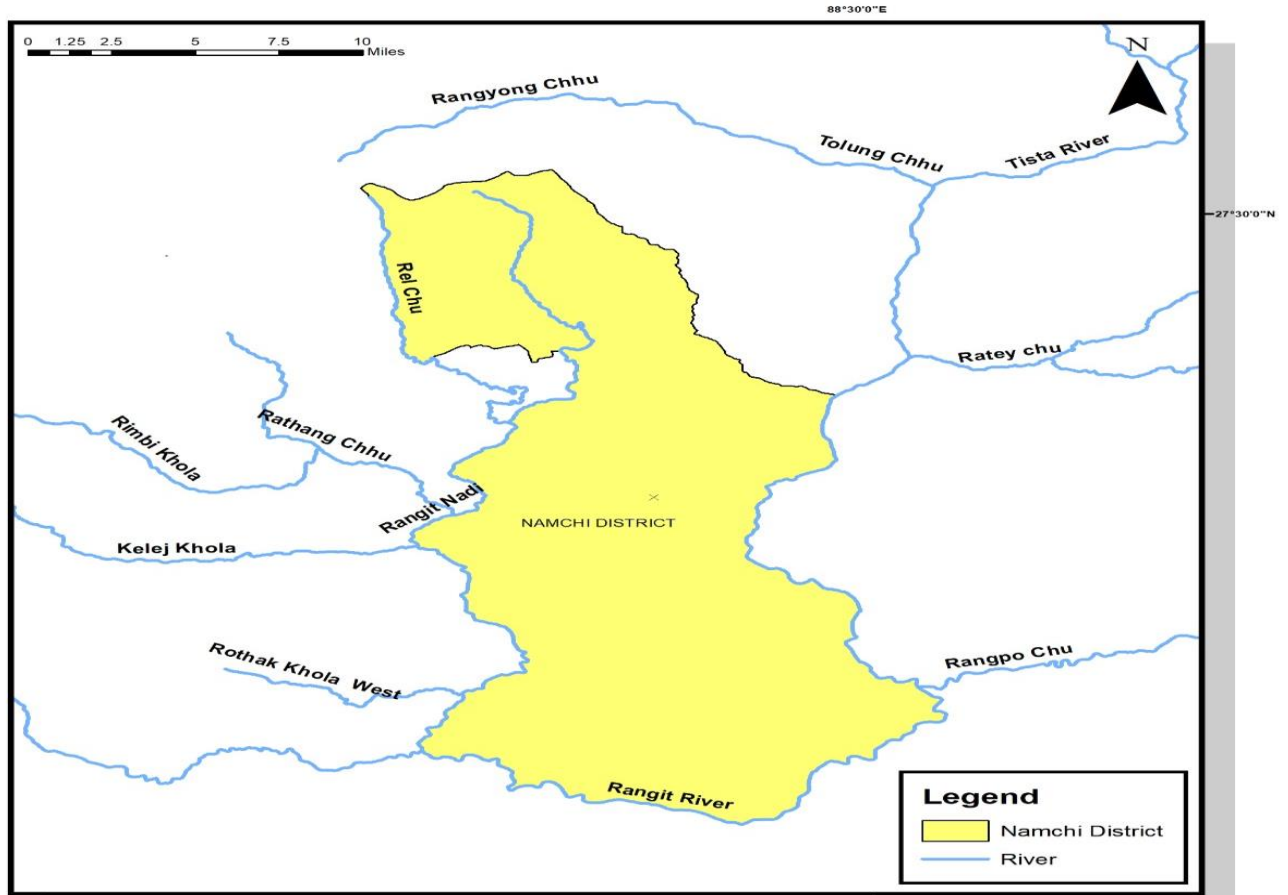
Government of Sikkim  
Forest & Environment Department

**Legend**

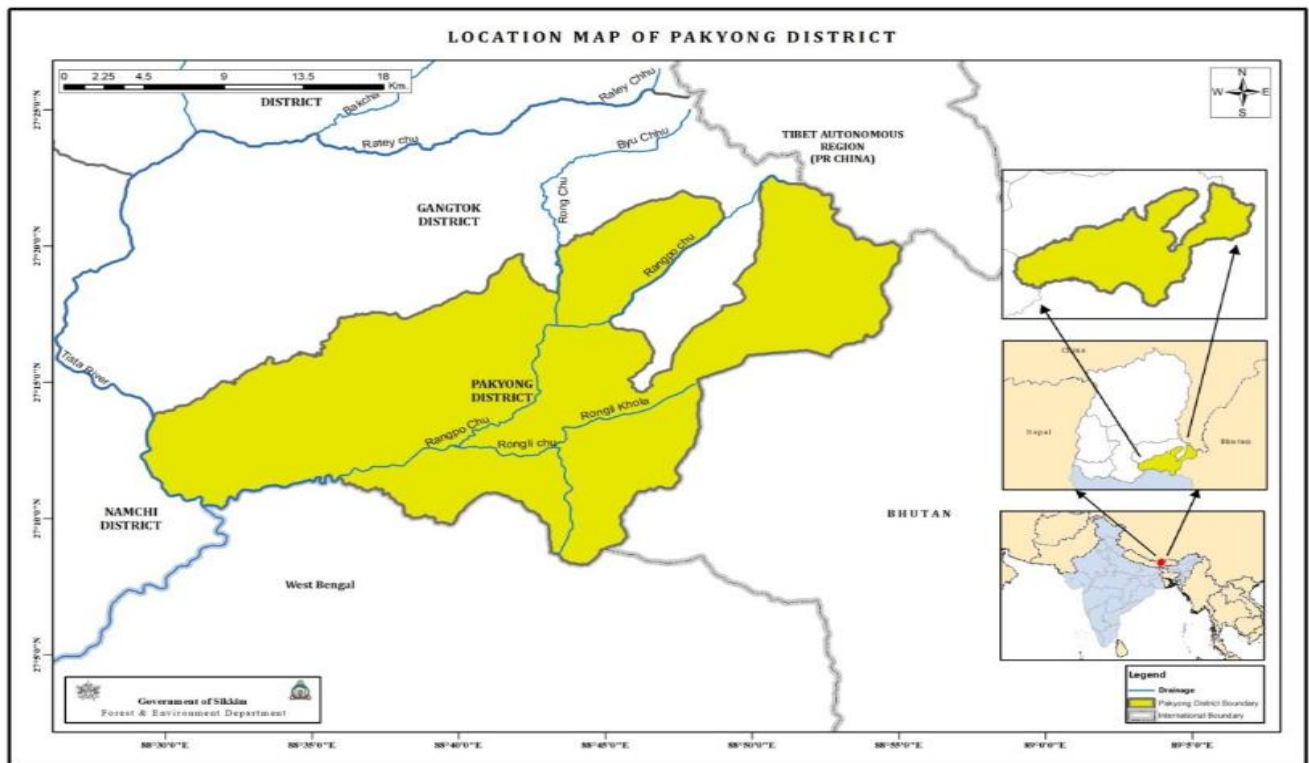
- District Boundary
- Mangan District
- International Boundary

88°10'E 88°20'E 88°30'E 88°40'E 88°50'E

### NAMCHI DISTRICT MAP



### LOCATION MAP OF PAKYONG DISTRICT



### **e. Land-use Pattern**

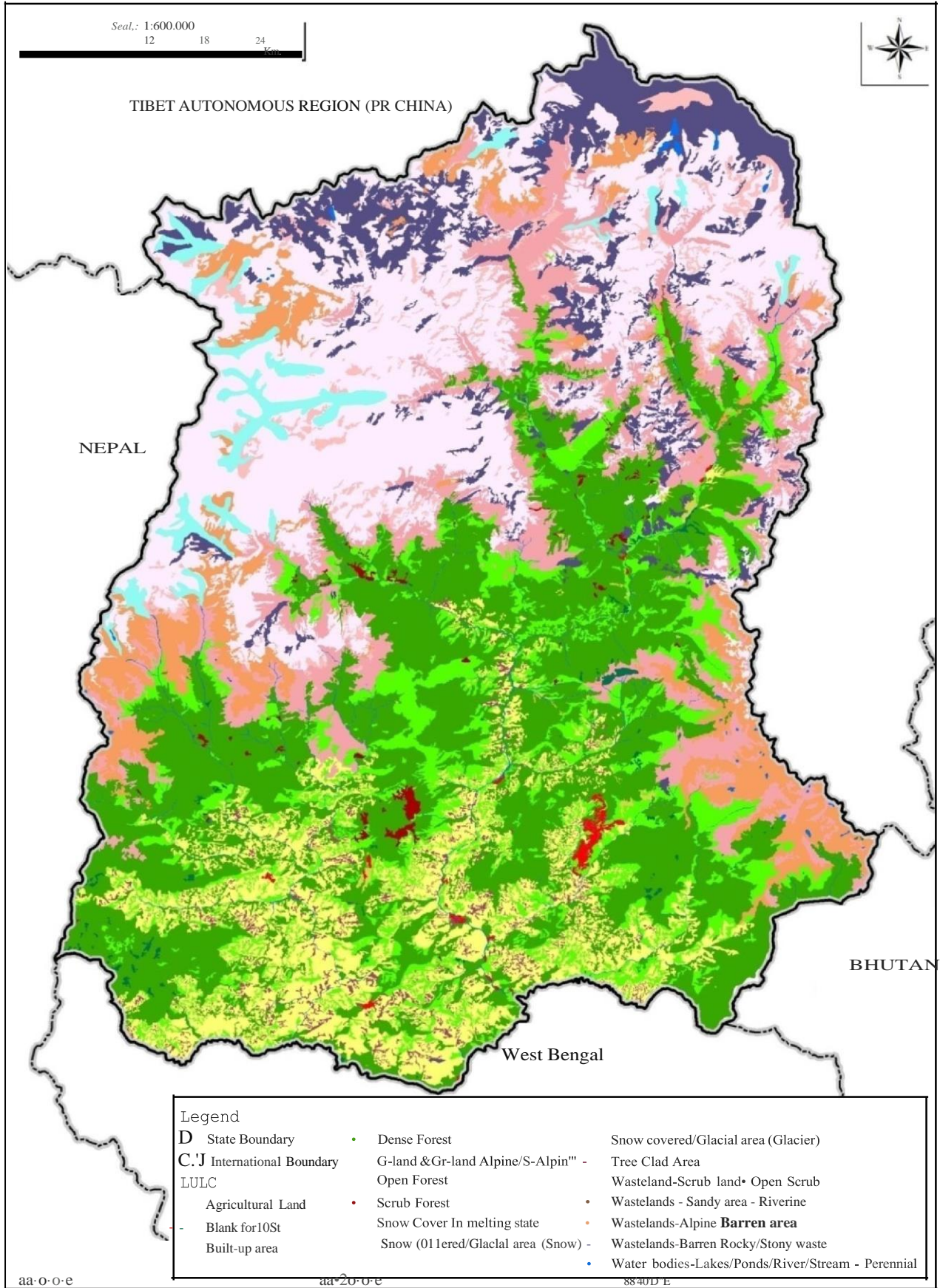
Majority of the land of Sikkim is under forest cover and nearly 82.31% of the geographical area of the state is under the administrative control of the State Forest Department. The forest cover of the state is 47.62% of the total geographical area of the state (82.31%). The Protected area network of the state constitutes about 30.77% of the total geographical area with Khangchendzonga National Park (KNP) and Khangchendzonga Biosphere Reserve (KBR), and 7 Protected Areas of Shingba Rhododendron Sanctuary, Barsey Rhododendron Sanctuary, FambongLho Wildlife Sanctuary, Maenam Wildlife Sanctuary, Pangolakha Wildlife Sanctuary, Kitam Bird Sanctuary and Kyongnosla Alpine Sanctuary. An orchid conservation zone at Tinkitam has been declared as the Sling Dong Fairrieanum Orchid Conservation Reserve for the conservation of a rare Lady's Slipper orchid *Paphiopedilum fairrieanum*. Agriculture is the primary activity of the people of Sikkim and thus forms the major economy of the state. About 15.36% of the total geographical area of the land is utilized for agriculture. Sikkim accounts for the largest share of cardamom production in India and has the major tourist spots in the north- eastern region of India.

### **f. Climate, Rainfall and Temperature**

The climate of Sikkim is extremely varied largely due to altitudinal variation. The topography of Sikkim thus ranges from low belt (tropical climatic zone) up to high alpine belt (Trans-Himalayan climatic zone). Because of this great variation in landscape, Sikkim experiences a diverse range of rainfall and temperature. Low temperature, high rainfall on windward slopes, comparatively dry on the leeward side and heavy precipitation in the form of snow at the mountain top are the main features of the climate. The monsoon winds dominate the climate and thus experiences seasonal climatic conditions resulting in four seasons prevalent on the basis of the monsoon circulation over the state: 1. The cold weather season - December to February; 2. The spring weather season - March to May; 3. The south-west monsoon - June to September; 4. The period of retreating monsoon - October to November. The mean annual rainfall of Sikkim varies from 2000 mm. to 4000 mm. with intensity of rain from drizzling showers in lower altitude to torrential rains in higher altitude. There are two maximum rainfall areas (i) South-East region and (ii) South-West region. The annual rainfall of Sikkim is 2739 mm. The temperature varies with the altitude and slope aspect. The mean temperature in the lower altitudinal zone, it varies from 1.5 degree centigrade to 9.5 degree centigrade. The maximum temperature is usually recorded during July-August which varies from 21<sup>0</sup> Celsius to 26<sup>0</sup> Celsius and minimum during December-January between 6<sup>0</sup> Celsius and 8<sup>0</sup> Celsius. Climatic factors are influenced by altitude.



# LANDUSE AND LAND COVER (LULC) MAP OF SIKKIM



**2.0 Action Plans for complying with Waste Management Rules****(i) Solid Waste Management****(a) Current Status related to Solid Waste Management**

S.No.	Name of ULB	Population (2011 census)	Solid waste generated (TPD)
<b>Gangtok</b>			
1.	Gangtok Municipal Corporation	100286	48
2.	Singtam Nagar Panchayat	5868	2.7
<b>Pakyong</b>			
3.	Rangpo Nagar Panchayat	10450	4.8
<b>Mangan</b>			
4.	Mangan Nagar Panchayat	4644	0.95
<b>Namchi</b>			
5.	Namchi Municipal Corporation	12190	4.8
6.	Jorethang Nagar Panchayat	10244	5.6
<b>Gyalshing</b>			
7.	Gyalshing Nagar Panchayat	4013	2.0
<b>Soreng</b>			
-	-	-	-

S.No.	Local Bodies	No. of Village Panchayats/ Blocks
<b>Gangtok</b>		
1.	Block/Taluk/Mandal Tehsils	64
2.	Village/Gram Panchayats	51
<b>Pakyong</b>		
3.	Block/Taluk/Mandal Tehsils	5
4.	Village/Gram Panchayats	27
<b>Mangan</b>		
5.	Block/Taluk/Mandal Tehsils	4
6.	Village/Gram Panchayats	26
<b>Namchi</b>		
7.	Block/Taluk/Mandal Tehsils	8
8.	Village/Gram Panchayats	150
<b>Soreng</b>		
9.	Block/Taluk/Mandal Tehsils	6
10.	Village/Gram Panchayats	200/36
<b>Gyalshing</b>		
11.	Block/Taluk/Mandal Tehsils	-
12.	Village/Gram Panchayats	-

**(b) Identification of Gaps and Action Plan:**

S. No.	Action points for villages / blocks/ town municipalities / City corporations	Action Plan	Responsible agencies	Timeline for completion of action plan
1.	<b>Segregation</b>			
i)	Segregation of waste at source	<ol style="list-style-type: none"> <li>1. Increase in frequency of garbage collection should be done for all districts</li> <li>2. Extensive outreach programme is being conducted by UDD, GoS to generate awareness of public of segregation of solid waste into bio degradable, non-biodegradable and domestic hazardous waste in all the districts.</li> <li>3. Notice regarding compulsory source segregation has been issued by the office of Chief secretary vid Ref.No.133/CS/SKM/2022 dated 30/11/2022</li> <li>4. Awareness campaigns were organized for behavioral change including “Swachha Mashaal March” and “Safai Abhyan” Self-help groups are being involved in awareness campaigns for all districts</li> <li>5. The UDD has conducted awareness programs on inclusion of domestic hazardous waste &amp; its segregation in separate</li> </ol>	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	2025 onwards



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		<p>bins. Blue and green colored bins have been provided to segregate dry and wet waste is being done in all the districts</p> <p>6. Segregation area for waste management to be allotted for all ULBs &amp; RLBs.</p> <p>7. To reduce the generation of waste hotels/ resorts/ restaurants are directed by ULBs in trade license to utilize their food waste as animal feed in local community.</p>		
<b>2.</b>	<b>Sweeping</b>			
i)	Manual Sweeping	<p>1 Sweeping schedule to be determine by the ULBs and initiated accordingly in <i>Exterior</i>: parks, gardens, religious places and <i>Interior</i>: laboratories, office buildings, complexes.</p> <p>2 Strict regulation on the workers to be framed for following the waste management procedures at source keeping in mind their own health and also to avoid dust pollution.</p> <p>3 PPE suits, goggles, gloves, boots etc. to be provided to all manual workers to ensure a healthy environment and proper health checkups to be done routinely to check for any profession related health risks.</p> <p>4 Increase in man power in all districts</p>	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	2025

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ii)	Mechanical Road Sweeping & Collection	<ol style="list-style-type: none"> <li>1. Mechanical sweeping and collection machines /equipment should be implemented in all 6 districts.</li> <li>2. Due to rapid urbanization, great demand for building materials have arisen in the urban areas causing greater Solid waste particle problems, which could be addressed by Mechanical cleaning.</li> </ol>	Urban Development Department/ DAC	2025
<b>3. Waste Collection</b>				
i)	100% collection of solid waste	<ol style="list-style-type: none"> <li>1. Providing eco-friendly/conventional composting bin system for wet waste and maintaining them in hygienic manner.</li> <li>2. Aerobic bins for organic waste.</li> <li>3. 100% collection of solid waste from household to be achieved</li> <li>4. Rural areas also to practice cent percent waste collection in all districts.</li> <li>5. Total of 335 waste segregation sheds, 33 RRCs and 16 plastic waste management waste have been constructed by RDD, Govt. of Sikkim.</li> <li>6. Composting is highly suitable in rural areas for waste management ,340 community compost pits have been constructed by RDD</li> </ol>	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	2025

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		<p>for the same.</p> <p>7. The RDD has further proposed to construct 1,116 individual &amp; 2,870 community compost pits in the state.</p>		
ii)	Arrangement for door- to-door collection	<ol style="list-style-type: none"> <li>1. Planning to install huge bins and identify to those uncovered areas.</li> <li>2. Awareness at grassroots level.</li> <li>3. Door to door collection is carried out by Swachha Grahis at GPU level in Pakyong district.</li> <li>4. In order to increase the frequency of waste collection on daily basis, resource to be mobilized by deploying adequate vehicles and man power.</li> <li>5. Garbage fees are made mandatory for all waste generators under Rule 4(3) of the SWM Rules, 2016 &amp; byelaws of the UDD</li> <li>6. Minimization of waste circulate pamphlets to citizen to generate public awareness on the necessity of door to door collection is to be done more frequently.</li> </ol>	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	Continuous process
iii)	Waste Collection trolleys with separate compartments	<ol style="list-style-type: none"> <li>1. At least 10 Nos of waste collection trolleys are required for Pakyong district.</li> <li>2. Required 10 Nos for Gangtok and 3 Nos for Singtam.</li> <li>3. Need for upgradation in Mangan district.</li> <li>4. 4 Nos of garbage collection trucks are available and 5 Nos are available in rural areas in Soreng district. Need for upgradation in the district.</li> </ol>	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centers, Gram Panchayat Units.	2025

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		<ol style="list-style-type: none"> <li>5. 5 Nos are available in the Geyzing district. Requirement for more in the district.</li> <li>6. To be procured for all districts.</li> </ol>		
iv)	Mini Collection Trucks with separate compartments	<ol style="list-style-type: none"> <li>1. No Mini Collection trucks is available in all districts.</li> <li>2. Required 5 Nos for Gangtok and 1 No for Singtam.</li> <li>3. To be procured for all districts.</li> <li>4. Procurement list has been submitted to UDD, GOS and need to get update on it.</li> </ol>	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centers, Gram Panchayat Units.	2025
v)	Waste Deposition Centres (for domestic hazardous wastes)	<ol style="list-style-type: none"> <li>1. Domestic hazardous wastes to be designated in all the districts in consultation with Urban Development Department.</li> <li>2. Awareness for e-waste &amp; hazardous waste should be generated to the public mandated by District authorities.</li> <li>3. Authorized agency for DHW collection to be assigned in the district in consultation with SPCB.</li> <li>4. Collection and deposition through authorized agency to facilitate collection of domestic hazardous waste hence reducing the chances of hazardous wastes ending up in landfills.</li> <li>5. Plastic waste management units are</li> </ol>	State pollution Control Board, Urban Development Department, Rural Development Department, District Administration, Block Administrative Centers, Gram Panchayat Units.	2026

		<p>being proposed for all block in Mangan district.</p> <p>6. Domestic hazardous waste deposition center by installing black container with marking to be setup at Soreng district HQ and Sipchu landfill site.</p>		
<b>4.</b>	<b>Waste Transport</b>			
i)	Review existing infrastructure for waste Transport.	At least 2-3 mini collection trucks, waste trolleys and bulk waste trucks to be procured for each districts for waste collection.	Urban Development Department, RDD, District Administration, Block Administrative Centres, Gram Panchayat Units.	2025
ii)	Bulk Waste Trucks	<ol style="list-style-type: none"> <li>1. Bulk waste collection to be regularized in urban areas.</li> <li>2. Biodegradable waste can also be used as manure for plantation during the plantation season by concerned departments.</li> <li>3. Such manure produced by local can be utilized through proper regulated markets.</li> <li>4. Adequate numbers of trucks to be maintained in each districts.</li> <li>5. Most of local vegetable market/Bazaar/Mandis leftovers are collected by local people as</li> </ol>	Urban Development Department, Rural Development Department, Silviculture Sector under Forest Department, District Administration, Block Administrative Centers, Gram Panchayat Units.	2025

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		<p>animal feed which is to be encouraged for all districts..</p> <p>6. Procurement of more trucks in all the districts as per requirements.</p>		
iii)	Waste Transfer Points	<ol style="list-style-type: none"> <li>1. Segregated waste to be deposited by carriers directly at their designated sites.</li> <li>2. Currently, all waste is directly transferred to Waste Processing Facility in all districts.</li> <li>3. Site to be identified near towns and market areas.</li> </ol>	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units	Continuous process
<b>5.</b>	<b>Waste Treatment and Disposal</b>			
i)	Wet-waste Management: On- site composting by bulk waste generators (Authority may decide on requirement as per Rules)	<ol style="list-style-type: none"> <li>1. In case of unavailability of land, dispose of as per the direction of ULBs from time to time.</li> <li>2. Compost plant of capacity 1 TPD has been installed in Lal Bazaar (Vegetable market) in Gangtok, which can be replicated in all vegetable markets of different districts.</li> <li>3. Compost plant of capacity 25kg has been installed in Mangan.</li> <li>4. Organic waste composter machine to be made available in all districts.</li> <li>5. On-site composting and packaging to be done.</li> <li>6. Most of the bulk waste generated from local</li> </ol>	State Pollution Control Board, Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	2026

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		<p>vegetable market/Bazaar/Mandis leftovers are collected by local people as animal feed in Soreng district.</p> <p>7. Shall be installed, if necessary, after survey and identification in all districts.</p> <p>8. Installation of Excel Bio Turn machine to be done in all districts.</p>		
ii)	Wet-waste Management: Facility(ies) for central Bio-methanation / Composting of wets waste.	<p>1. Specified in the action plan. Under SBM(G) Mission Phase II all 32 blocks of the state is under the process of setting up community compost pits</p> <p>2. 2,870 community compost pits and 1,116 individuals compost pits are proposed for construction in the state.340 community compost pits have been constructed.</p> <p>3. Bio-methanation plants are available at 32 no. Martam &amp; Geyzing for the state.</p> <p>4. Included in proposal for SWM facility area selected for the facility in Mangan has been damaged by Flash Flood.</p> <p>5. A mandatory policy to adopt composting wet waste at household level rather than depositing them in landfills in all districts.</p> <p>6. This will be strategy to reduce waste deposition at landfills and also alternate source of energy can be explored.</p>	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres.	2026

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iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	<ol style="list-style-type: none"> <li>1. All district to install Dry-Waste Management; Material Recovery for dry- waste fraction.</li> <li>2. Attachment of <i>kabbadiwallas</i> to Labour department with proper registration and identification to improve their job profile.</li> <li>3. In addition to RRC and RDF, systematic centers for <i>kabbadiwallas</i> could be setup at local level before transporting them to deposition centers.</li> <li>4. Maintenance of systematic and authentic/regular data on waste generation and its composition.</li> <li>5. Plastic waste management units and resource recovery centers has been constructed at block level in order to manage dry waste in Pakyong district, which could be a feature mandated for all districts.<sup>9</sup></li> <li>6. Recyclable wastes are sent to West Bengal from Martam WPF.</li> <li>7. The RDD has selected 2 divisions in the district and 4 GPUs (Samlik Marchak &amp; Martam Nazitam) as model villages for compliance to the directions of hon'ble NGT in the matter of 606/2018. Setting up of RRC in all blocks in under process. Selection of RDF firms for the state is under process by UDD Govt. Of Sikkim.</li> <li>8. The RDD has selected 2 divisions in Namchi district and 4 GPUs</li> </ol>	Labour Department, Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	Continuou s process
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		<p>(Namthang Sumbuk Sikkip and Yangang) as model villages for compliance to the direction of hon'ble NGT in the matter of 606/2018. Setting up of RRC in all blocks in under process. Selection of RDF firms for the state is under process by UDD Govt. Of Sikkim.</p> <p>9. The RDD has selected 2 divisions in Geyzing and Soreng district and 4 GPUs (Dentam Geyzing Mangalbarey &amp; Soreng) as model villages for compliance to the directions of hon'ble NGT in the matter of 606/2018. Setting up of RRC in all blocks in under process. Selection of RDF firms for the state is under process by UDD Govt. Of Sikkim.</p> <p>10. Included in the proposal for SWM Facility the area selected in Mangan has been damaged by flash flood.</p> <p>11. 33 RCCs 16 PWM units ,335 waste segregation sheds &amp; 340 community compost pits have been constructed by RDD Govt. of Sikkim.</p>		
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iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	<ol style="list-style-type: none"> <li>1. Sanitary landfill available at 32 mile for all district.</li> <li>2. Dumpsite located at Sipsu. Currently the State Government is under process to convert the same into a sanitary landfill facility in West district.</li> <li>3. Restoration of dumpsite depending on the volume of waste generated.</li> <li>4. Solid waste management options like RDF and Waste to Energy to be explored and implemented as applicable.</li> <li>5. Enabling early use of land with a semi-aerobic landfill structure (Compared to anaerobic landfill, the semi-aerobic landfill technology quickly stabilizes landfill sites after the land has completed its role as landfill, enabling it to be used for parks and open space for sports).</li> <li>6. The RDD has selected 2 divisions in Namchi district and 4 GPUs (Namthang, Sumbuk, Sikkip &amp; Yangang) as model villages for compliance to the directions of hon'ble NGT in the matter of 606/2018. Construction of RRC in all 32 blocks in the state is under process.</li> <li>7. Included in proposal for SWM facility soon to be developed in Mangan district. Awaiting for review report from SEIAA Sanitary landfill for Mangan district was designated at Ringdang, below Singhik. The proposed project construction is yet to start.</li> </ol>	State Pollution Control Board, Urban Development Department, Rural Development Department, District Administration.	2026
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v)	Remediation of historic / legacy dumpsite	<ol style="list-style-type: none"> <li>1. Formal contract agreement for the execution of bio-mining of legacy waste at Martam landfill at an estimated cost of Rs. 22.00 crore has been concluded with M/s Greentech Environ Management Pvt. Ltd. and GNS Builders-Gangtok (Joint venture) on 18.10.2023 and work has commenced.</li> <li>2. Bio-methanation plant of capacity 5MT per day has been commissioned at Martam.</li> <li>3. Selection of biomining firm for remediation under process at Namchi &amp; Geyzing district.</li> <li>4. Sanitary landfill yet to be constructed in Mangan district.</li> <li>5. Shall be taken up when the common solid waste treatment and management facility comprising of sanitary landfill shall be constructed at the existing dumpsite in Soreng district.</li> <li>6. Phytoremediation to be initiated/ explored.</li> <li>7. Maintenance of dumpsite by plantation of natural or planted vegetation on landfill sites has an important role in erosion control and removal of contaminants, and may also be used in leaching treatment.</li> <li>8. Afterlife of sanitary landfills to be converted into usable facilities like parks, gardens and open space for sports.</li> <li>9. NGOs in the districts to be involved</li> </ol>	Forest & Environment Department, Urban Development Department.	Continuous Process
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vi)	Involvement of NGOs	<ol style="list-style-type: none"> <li>1. Local NGOs such as Voyage Sikkim has been granted NOC by SPCB for collection of plastic waste on household level in Gangtok area.</li> <li>2. NGOs has also been involved in survey of Urban areas for data generation to ensure phasing out of SUPs.</li> <li>3. Planning to envisage NGOs for campaigning SWM should be made more frequently in all districts.</li> <li>4. NGOs are also involved in cleaning public places or in any Swachhata activities.</li> <li>5. Sri Satya Sai organization, Pragati Sangh for IEC activities at Soreng. SAGs and community organizations are involved in IEC activities in NJNP.</li> <li>6. NGOs such as Khangchendzonga conservation community have been involved with assisting the department of Forest and Environmental department to ensure that all plastic waste in the Khangchendzonga National park is counted for. They have also set up RRCs for solid waste management in Yuksom in Geyzing district.</li> </ol>	Urban Development Department, Rural Development Department, District Administration.	Continuous Process
vii)	EPR of Producers: Linkage with Producers /Brand Owners	<ol style="list-style-type: none"> <li>1. The SPCB Sikkim has initiated registration of single use plastic manufacturers and producers in the state as per the new SOP prepared by the CPCB.</li> <li>2. Licensing authorities have been directed to prepare inventory of brand owners of</li> </ol>	Urban Development Department, Rural Development Department, District Administration, Block	Continuous process

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		<p>authorized dealers. Many producers have approached GMC for implementation of EPR.</p> <ol style="list-style-type: none"> <li>3. SPCB coordinating with all industries in the state to facilitate ULB for plastic collection.</li> <li>4. Producers/Distributors to be sensitized on waste generation issues of the district and extend EPR</li> <li>5. Based on data from SPCB, the district major Producer/Distributors/Br and owners of the district to be identified and EPR to be assigned accordingly by UDD/ Municipal Corporations.</li> </ol>	Administrative Centres, State Pollution Control Board-Sikkim.	
viii)	Authorization of Waste Pickers	<ol style="list-style-type: none"> <li>1. Registration done by ULBs for those working in Martam WPF.</li> <li>2. Information available with MEO, Geyzing, Nayabazaar Jorethang and Namchi.</li> <li>3. It is initiated and shall be authorized by ULB level in Mangan district.</li> <li>4. Informal garbage vehicle workers monthly honorarium basis. Not formally integrated in the organization in Soreng district.</li> <li>5. Proper sanitary facilities to be provided to all waste pickers.</li> <li>6. Regulation of job profile and schedule of jobs to be done.</li> <li>7. Awareness and Sensitization.</li> <li>8. Waste / rag pickers to work in association with NGOs</li> </ol>	Urban Development Department, Rural Development Department, Block Administrative Centres	2025

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ix)	Preparation of own by-laws to comply with SWM Rules 2016	Prepared and Notified vide Govt. of Sikkim Gazette notification no. 5/UD&HD dated 29.04.2019	Urban Development Department & Rural Development Department  Forest & Environment Department,	In progress
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**(ii) Plastic Waste Management****(a) Current Status related to Plastic Waste Management**

S.No.	Name of ULB	Population (2011 census)	Plastic waste generated (TPA)
<b>Gangtok</b>			
1.	Gangtok Municipal Corporation	100286	37.5
2.	Singtam Nagar Panchayat	5868	1.4
<b>Pakyong</b>			
3.	Rangpo Nagar Panchayat	10450	28
<b>Mangan</b>			
4.	Mangan Nagar Panchayat	4644	5.0
<b>Namchi</b>			
5.	Namchi Municipal Corporation	12190	6.94
6.	Nayabazar Jorethang Nagar Panchayat	10244	4.4
<b>Gyalshing</b>			
7.	Gyalshing Nagar Panchayat	4013	1.4
<b>Soreng</b>			
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**(b) Identification of Gaps and Action Plan:**

S.No.	Action points for village panchayats/blocks /municipalities/corporations	Action Plan	Agencies Responsible	Target time for compliance
1.	Door to door collection of dry waste including Plastic Waste (PW)	<ol style="list-style-type: none"> <li>All recyclable plastic is sent to West Bengal as no recycling facility is available in the state.</li> <li>The Govt of Sikkim vide Gazette notification no. 145 dated 8th of July 1998 amended the Sikkim trade license and miscellaneous provision rule 1985 wherein the use of plastic wrappers or bags for purchase of any goods or materials was prohibited.</li> <li>The Govt of Sikkim vide notification no.25/Home/2016 dated 19/05/2016</li> </ol>	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units	Continuous process

		<p>directed that the packaged drinking water bottles may not be used in any Govt Meetings/Functions in order to reduce plastic waste’</p> <p>4. The Govt of Sikkim vide notification no.26/Home/2016 dated 19/05/2016 announced the ban on sale and use of disposable items made from Styrofoam throughout the state keeping in view its various ill effects to environment and human health.</p> <p>5. The Govt of Sikkim vide notification No. S.O. 152 (E) dated 10<sup>th</sup> February 1988 read with Rule 4 of the Environment (Protection) Act, Rules, 1986, The state Government imposes ban of use, manufacture, import and sale of plastic water bottles of capacity 2 litres and below w.e.f. 1<sup>st</sup> January 2022 in the state of Sikkim. This is in supersession of Notification No. 25/Home/2016 Dated 19/05/2016</p> <p>6. To reduce the use of packaged water bottles, 3 water kiosks with storage tanks of 2000ltrs and 500ltrs has been installed at M.G Marg, Gangtok. (As per PHE Department Annexure – A)</p>		
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		<ol style="list-style-type: none"> <li>7. Swachhagrahis, waste pickers and households themselves are available to collect waste generated from households in all districts.</li> <li>8. Awareness regarding segregation and collection of plastic waste at source extremely necessary.</li> <li>9. Collection of PW once a week door-to-door. Or collection through <i>kerbside</i> collection.</li> <li>10. Involvement of NGOs could be explored.</li> </ol>		
2.	Facilitate organised collection of PW at Waste Transfer Point or Material Recovery Facility	<ol style="list-style-type: none"> <li>1. Plastic waste collection centers to be established in every district.</li> <li>2. PW to be utilized / recycled extensively in road construction, building constructions, household goods, etc.</li> <li>3. Plastic Recycling plants to be established in every district.</li> <li>4. Creation of Smart District App. to locate the nearest collection point.</li> <li>5. Installation of aerobins / aerobic bins for waste treatment.</li> <li>6. Creation of sufficient domestic markets for more recyclable materials.</li> <li>7. Assistance and support to the households on waste treatment at source.</li> <li>8. Notifications banning</li> </ol>	State pollution control board, Forest & Environment Department, Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units	2025

		<p>plastic usage across different items have been effective in the state (Notification enclosed).</p> <p>9. SPCBs/PCCs should develop laboratory facility for testing of thickness of plastic carry bags and plastic materials in the sachets/pouches.</p> <p>10. Plastic recycling rates to be increased.</p> <p>11. Ban on burning of tires and plastic waste has been notified.</p> <p>12. Ban on use of packaged drinking water of 2 liters and below in the state have been notified.</p> <p>13. Ban on Sale and Use of Styrofoam products/cutlery has been notified.</p> <p>14. 3 Plastic Waste Management Units Functional at Pakyong district at location BAC Premises (Rhenock Block), BAC Premises (Parakha Block) &amp; Lingtam Phadamchen (Reghu Block)</p> <p>15. 1 PWM unit functional at Gangtok district at location BAC premises (Rakdong Tintek Block)</p> <p>16. 6 PWM units under construction in both Pakyong and Gangtok district. (As per RDD, Annexure -B)</p> <p>17. Site for transfer station at district HQ to be identified in Soreng district</p>		
3.	PW Collection Centres	1. 2 nos. of PET bottle shredding machine	State pollution control board,	2025

		<p>are being installed in MG Marg.</p> <ol style="list-style-type: none"> <li>2. 1 no. of PET bottle shredding machine is being installed at Namchi taxi stand.</li> <li>3. 1 no. of PET bottle shredding machine is being installed at the main highway at Rangpo Bazaar.</li> <li>4. 1 no. of PET bottle shredding machine is being installed at Jorethang near Taxi parking plaza.</li> <li>5. 6 nos. of Bailing Machine are delivered in all ULBs which are being installed in the above mentioned MRFs manage their dry waste by reducing their volume &amp; making it easier for ULBs to transport to the recyclers</li> <li>6. PW collection center to be installed by brand owners under EPR assignment by DAC/SPCB, thereby, providing employment opportunities.</li> <li>7. Innovative schemes of Zero- waste system to be improvised such as local Zero-waste shopping service, incentivize</li> <li>8. Deposit-refund schemes (DRS) to be enacted by EPR.</li> <li>9. The SPCB-Sikkim has initiated registration of single use plastic manufacturers and producers in the state as per the new SOP</li> </ol>	<p>Urban Development Department, Rural Development Department</p>	
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		<p>prepared by CPCB.</p> <p>10. . Licensing authorities have been directed to prepare inventory of brand owners of authorized dealers in order to implement the provisions of Rule 9 i.e. Responsibilities of producers, Manufacturers and Brand Owners under the Plastic Waste Management Rules, 2016.</p> <p>11. SPCB is coordinating with all industries in the state to facilitate ULBs for plastic collection.</p>		
4.	Awareness and Education Program Implementation	<ol style="list-style-type: none"> <li>1. Create awareness among all stakeholders about their responsibilities including house holders or owners or occupiers.</li> <li>2. Community campaign to be initiated by the environment sector of the Forest Department.</li> <li>3. Use of banned plastic items still observed within the State, strict regulatory orders to be issued against it by authorities.</li> <li>4. Improved Zero-waste system to be strictly followed in the tourist destination spots.</li> <li>5. Intensive research in the state regarding plastic waste, its effect and its mechanism to be implemented on scientific level.</li> </ol>	State pollution control board, Forest & Environment Department, Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units	Continuous process

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		<p>6. All education institutes (Schools, Colleges, etc.), GPUs to be involved in the awareness program of the various departments.</p> <p>7. Conducted by SPCB Sikkim in coordination with UDD, RDD, MSME, Krishi Vigyan Kendra and District Authorities.</p> <p>8. Street plays has been conducted, videos and jingles has also been released by SPCB Sikkim for all districts.</p> <p>Inspection is being conducted by implementing agencies every week for verification of SUP ban in ULBs of all districts.</p>		
5.	Access to plastic waste disposal facilities	<p>1. Recycling facility for plastic waste has not been set up in the state.</p> <p>2. 49.15 MT of plastic waste has been transported by Gangtok Municipal Corporation to Meghalaya for co-processing.</p>	State pollution control board, Urban Development Department, Rural Development Department	2026

**(iii) C & D Waste Management****(a) Current Status related to C & D Waste Management**

Details of Data Requirement	Present Status					
	Gangtok	Pakyong	Mangan	Namchi	Soreng	Gyalshing
Total C & D waste generation in MT per day (As per data from Municipal Corporations/Municipalities)	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Does the District have access to C & D waste recycling facility?	Not Available.	Not Available	Not Available	Not Available	Not Available	Not Available

**(b) Identification of Gaps and Action Plan**

S.No.	Action points for blocks/town municipalities/City corporations	Action Plan	Responsible Agency	Time line for Completion of action plan
1.	Arrangement for separate collection of C&D waste to C&D waste deposition point.	<ol style="list-style-type: none"> <li>1. C&amp; D waste deposition points to be earmarked by the Forest Department.</li> <li>2. Muck dumping sites to be notified for each district.</li> </ol>	Forest & Environment Department.	20 25
2.	Whether local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in month?	Forest & Environment Sector to levy fees on bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in month.	Forest & Environment Department.	Continuous process

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3	C&D recycling Facility	SPCB, UDD, GOS to explore the need and plan the C&D recycling Facility in the state.	SPCB, UDD, GOS	20 25
4	Usage of recycled C&D waste in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads	<ol style="list-style-type: none"> <li>1. All Govt. Departments to explore avenues to use/recycle C&amp;D wastes in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads.</li> <li>2. Domestic/Household waste recycling can be regulated by UDD &amp; SPWD, GoS.</li> <li>3. Usage/Recycling of C&amp;D wastes in Projects/Companies established in the state to be made mandatory. Rules to be framed by UDD. Regulation to be followed up by Commerce &amp; Industries Dept.</li> </ol>	UDD & SPWD, GOS Commer ce & Industries Dept	20 25
5	ICE on C & D waste management	1. Awareness programs to be conducted in all districts of the state on regular basis.	UDD, RDD, District Administration	Conti nuous proce ss

**(iv) Biomedical Waste Management****(a) Current Status related to Biomedical Waste**

Inventory of BMW in the District	Quantity					
	Gangtok	Pakyong	Mangan	Namchi	Soreng	Gyalshing
Total no. of Bedded Healthcare Facilities	7	5	6	8	4	5
Total no. of non-bedded HCF	94	68	27	70	26	24
No. of HCFs authorized by SPCBs/PCCs	207	123	32	55	30	25
No. of Common Biomedical Waste Treatment and Disposal Facilities (CBWTFs)	nil	nil	nil	nil	nil	nil
Capacity of CBWTFs	NA	NA	NA	NA	NA	NA
No. of Deep burials for BMW if any	23 nos.	44 nos.	25 nos.	46 nos.	28 nos.	22 nos.
Quantity of biomedical waste generated per day	367kg/day	56 kg/day	11 kg/day	104kg/day	6kg/day	42kg/day
Quantity of biomedical waste treated per day	300 kg/day	30 kg/day	2 kg/day	78.169 Kg/day	11 kg/day	30.32 kg/day



**(b) Identification of Gaps and Action Plan:**

S l · N o ·	<b>Action points for blocks/town municipalities/City corporations</b>	<b>Action Plan</b>	<b>Responsible Agency</b>	<b>Timeline for completion of Action plan</b>
1	Inventory and Identification of Healthcare Facilities	<ol style="list-style-type: none"> <li>Inventory has been prepared by SPCB and submitted to CPCB for all districts.</li> <li>Authorization and annual report are submitted every year by all HCFs under Mangan district to SPCB Gangtok, Sikkim.</li> </ol>	Department of Health & Family Welfare, State Pollution Control Board	Completed (the same shall be updated in the future if any changes occur)
2	Adequacy of facilities to treat biomedical waste	<ol style="list-style-type: none"> <li>Primary Health Centres to be equipped to treat biomedical wastes within premises.</li> <li>Government should introduce new rules for the safe disposal and treatment of household sanitary wastes (like diapers and sanitary napkins)</li> <li>Appropriate policy and legal framework is necessary for the management of menstrual wastes.</li> <li>Proposal for acquiring land for construction of CBWTF has been initiated by Health &amp; Family Welfare Department.</li> </ol>	Department of Health & Family Welfare, Department of Commerce & Industries SPCB – Sikkim	2026
3	Tracking of BMW	<ol style="list-style-type: none"> <li>Common Bio Medical Waste Treatment Facility to be made operational in all districts. Currently, all BMW generated in HCFs undergo captive treatment within the facility itself.</li> <li>The same to be extended to rural PHCs</li> <li>Plan for implementation of bar code system by all HCFs and CBWTFs in Mangan district.</li> </ol>	Department of Health & Family Welfare	2026

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4	Awareness and education of healthcare staff	<ol style="list-style-type: none"> <li>1. Mass awareness and education about BMW at household and educational institutions required to ensure proper segregation of BMW including contagious wastes like COVID.</li> <li>2. Installation of BMW bins.</li> <li>3. Installation of incinerators or female hygiene bins at educational institution, public toilets, HCFs and community level.</li> <li>4. At household level, low-cost pre- marked sanitary disposal bags to be produced in bulk by the state and distribute to the GPUs for free and make available at markets at low cost.</li> <li>5. Involvement of NGO, pharmacist, private diagnostic centers.</li> <li>6. Capacity building, awareness and training has been conducted for all healthcare workers to ensure proper management of BMW in the HCFs including COVID19 waste.</li> </ol>	Department of Health & Family Welfare, SPCB – Sikkim	Continuou s Process
5	Adequacy of funds	Funding to be done by the respective departments as the Action Plan assigns.	All departments, Govt. of Sikkim.	Continuo us process
6	Compliance to Rules by HCFs and CBWTFs	Specified in Action plan	Department of Health & Family Welfare	Continuo us process
7	District Level Monitoring Committee	<ol style="list-style-type: none"> <li>1. Formation of the committee and advisory body notified by State Government.</li> <li>2. Periodicity of reviews and follow ups by DLMC (DLMC has been formed under district hospital Mangan).</li> <li>3. Every quarter there is meeting of DLMC. District Medical Superintendent (DMS) is the convener of DLMC</li> </ol>	Department of Health & Family Welfare	Continuo us process

		of BMW management.		
8	Waste water treatment	<ol style="list-style-type: none"> <li>1. Pre-feasibility reports for wastewater treatment plants are planned for Mangan and Geyzing-Pelling (*Source: PHED).</li> <li>2. Require Wastewater treatment plant (WTP) at other urban areas of every district.</li> <li>3. As establishment of pharmaceutical industries are rising and still more developments are underway, there will be a rise in population and so does demand for land use and water. Hence, there might be a need for STPs in the district and future management must be planned.</li> <li>4. There is a liquid waste treatment system in place at all PHCs and District hospital Mangan to treat the waste water.</li> <li>5. Health &amp; Family Welfare Dept. has recently planned to establish ETP in all district hospital. All site inspection has been done and ETP will be set up in all district hospital in the state.</li> </ol>	Department of Health & Family Welfare, Public Health Engineering Department, Govt. of Sikkim	Continuous Process

**(v) Hazardous Waste Management****(a) Current Status related to Hazardous Waste Management**

Major source of hazardous waste (HW) is industries and facilities located in the districts, who are required to be regulated under Water (P&CP) Act 1974, Air (P&CP) Act 1981 and E(P) Act, 1986 and the Hazardous & Other Wastes (Management & Trans-boundary Movement) Rules, 2016 and the rules notified thereof. Many commercial establishments like automobile repair shops, paint workshops, stores, etc. may also generate small quantities of hazardous waste. The district administration should be aware of the type of hazardous waste generation in their district and adequacy of facilities for safe handling and disposal within or outside District. Linkage of district administration with common TSDFs in the State is necessary to establish system for safe disposal of domestic hazardous waste. However, since no CHWTSDF has been established in the state, the SPCB-Sikkim has initiated agreements & facilitated transport & disposal. The HW generated in Sikkim is transported to CHWTSDF at West Bengal for disposal, Refineries in West Bengal for recycling and co-processing facilities located in Assam, Chhattisgarh and Jharkhand.

Details of Data Requirement	Present Status					
	Gangtok	Pakyong	Mangan	Namchi	Soreng	Gyalshing
No. of Industries generating HW	8	20	-	21	-	-
Quantity of HW in the district	-	-	-	-	-	-
(i) Quantity of incinerable HW	550.55MT	834.85MT	-	401.93 MT	-	-
(ii) Quantity of land- fillable HW	-	-	-	-	-	-
(iii) Quantity of Recyclable/ utilizable HW	7.13MT	13.9MT	-	9.348 MT	-	-
No. of captive/common TSDF	-	-	-	-	-	-
Contaminated Sites or probable contaminated sites	-	-	-	-	-	-

**(b) Identification of Gaps and Action Plan:**

S l. N o.	Action points	Action Plan	Respons ible Agency	Timel ine for Com pleti on of Actio n plan
1	Regulation of industries and facilities generating Hazardous Waste	1. Inventorization of industries that may require authorization is completed and online authorization process has been initiated for Hydro Electric Power Plants.	State Pollution Control Board	Compl ied
2	Establishment of collection centres	1. Common Hazardous waste treatment storage – disposal facility to be established in the district. 2. All HW generated in the state is transported to: a) West Bengal Waste Management Ltd., Haldia, West Bengal for incineration; b) Calcom Cement, Assam for co-processing; c) Kundu Refinery, West Bengal for recycling. d) M/s Nilay Narayan Polychem LLP, Jharkhand for co-processing. e) M/s Ambuja Cements Ltd., Chhattisgarh for co-processing.	State Pollution Control Board	2025-2026
3	Training of workers involved in handling / recycling / disposal of HW	1. The SPCB –Sikkim during grant of authorization ensures that the Emergency Response Procedure has been prepared by the occupier. It has also been specified in the Specific conditions of the authorization to ensure safety of the people handling HW, procure spillage kits and provide PPEs. Compliance to the provisions of the Hazardous Waste (Management & Trans boundary Movement) Rules, 2016	State Pollution Control Board, Department of Labour, Occupier	Compl ied

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		<p>and authorization is verified in every inspection conducted by SPCB officials.</p> <ol style="list-style-type: none"> <li>2. Detailed mass awareness program related to HW handling.</li> <li>3. Implementation of program to prevent or reduce or minimize the generation of hazardous waste.</li> </ol>		
4	Availability / Linkage with common TSDF or disposal facility	The state of Sikkim does not have any facility for disposal of hazardous waste. The HW generated is transported to West Bengal, Assam & Meghalaya for co-processing, treatment and disposal.	State Pollution Control Board, Occupier	Complied
5	Contaminated sites	No area in the State of Sikkim has been listed in the 112 Contaminated sites and 168 Probable contaminated sites in the country.	SPCB-Sikkim	Action not necessary

**(vi) E- Waste Management****(a) Current Status related to E-Waste Management**

Details of Data Requirement	Present Status					
	Gangtok	Pakyong	Mangan	Namchi	Soreng	Geyzing
Inventor y of E-Waste in MT/year	5921 nos. in 2020-21	NIL	10 nos. in 2022-2023	NIL	NIL	NIL
Collectio n centers establish ed by ULBs in the District	1	NIL	1	2	1(NJNP)	NIL
Collectio n centers establish ed by Produce rs or their PROs	2 under verific ation by SPCB	NIL	NIL	NIL	1(DAC)	NIL
No authoriz ed E-waste recycler s / Dismantl er	None in the state. Sent to J.S. Pigmen ts, West Bengal.	NIL	NIL	NIL	NIL	NIL

**(b) Identification of Gaps and Action Plan:**

S • N o •	Action Points	Action Plan	Responsible Agency	Timeli ne for Compl etion of Action Plan
1	Inventory / Generation of E- Waste / Bulk-waste generators	<ol style="list-style-type: none"> <li>1. Identification &amp; listing of bulk consumers is under process in Pakyong district. After completion of listing, inventory details will be generated.</li> <li>2. Inventory preparation has been delayed for the remaining districts as many of the bulk consumers do not provide information.</li> <li>3. Information Education &amp; Communication (IEC) Plan from Information Technology Department is awaited for completion of inventory.</li> <li>4. To strictly follow-up the inventory management procedures for e-waste reduction.</li> <li>5. Survey and investigation to be conducted.</li> </ol>	Information Technology Department With SPCB.	2025
2	E-Waste collection points	<ol style="list-style-type: none"> <li>1. In each bazaar, e-waste collection points to be established.</li> <li>2. Planning for establishment of 1 collection center under RDD in Pakyong district</li> <li>3. Till date no collection Centre has been set up by producers in the district or has submitted proposal for EPR of such kind to the authorities.</li> <li>4. Licensing authorities have been directed to prepare inventory of</li> </ol>	Gangtok Municipal Council & Rangpo, Singtam Nagar Panchayat. UDD.	2025



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		authorized dealers in order to implement the ERP provisions of the E-waste Management Rules, 2016.		
3	Linkage among Stakeholders to channelize E- Waste	<ol style="list-style-type: none"> <li>1. Till date no collection Centre has been set up by producers in the district or has submitted proposal for EPR of such kind to the authorities.</li> <li>2. All e-waste generated in the state is transported to Authorized recycling Centre, M/s J.S. Pigments located in West Bengal.</li> </ol>	Gangtok Municipal Council & Rangpo, Singtam Nagar Panchayat. UDD.	Regular Activity
4	Regulation of Illegal E-Waste recycling /dismantling	<ol style="list-style-type: none"> <li>1. No such action has been observed or reported till date.</li> <li>2. Regular monitoring by District Administration/UDD/RDD/SPCB</li> </ol>	District Administration, UDD, RDD, SPCB	Regular Activity.
5	Integration of informal sector	<ol style="list-style-type: none"> <li>1. All e-waste generated in the state is collected and transported to authorized recycling facility. Informal sector for the same is not practiced in the state.</li> <li>2. IEC plan awaited from IT Department, Govt. of Sikkim.</li> </ol>	UDD, RDD, IT Department, Govt. of Sikkim.	Regular activity.
6	Awareness and Education	Conducted by SPCB-Sikkim in coordination with UDD, RDD, MSME, NIELIT, Krishi Vigyan Kendra and District Authorities.	District Administration, UDD, RDD, SPCB, MSME, NIELIT, Krishi Vigyan Kendra and District Authorities.	Regular Activity.

**(vii) Air Quality Management:****(a) Current Status Related to Air Quality Management**

Details of Data Requirement	Present Status					
	Gangtok	Pakyong	Mangan	Namchi	Soreng	Gyalshing
Number of Automatic Air Quality monitoring stations in the district. Operated by SPCB / State Govt. / Central govt./PSU agency: Operated by Industry:	1 no.	NIL	NIL	NIL	NIL	NIL
Number of manual monitoring States operated by SPCBs	2 nos. at Gangtok, and Singtam	01 at Rangpo	2 nos.	2 nos.	Under process for establishment for district HQ.	1
Name of towns/cities which are failing to comply with national ambient air quality stations	None	None	None	None	None	None
No. of air pollution industries	66 not including DG sets	33 Nos. (not including DG Sets)	12 nos. (not including DG Sets)	Nil	15 nos. (not including DG Sets)	NIL
Prominent air polluting sources [Large Industry] / [Small Industry] / [Unpaved Roads] / [Burning of Waste Stubble] / [Brick Kiln]/ [Industrial Estate]/[Others](Multiple selection)	Industrial units, Vehicular Emission, Dust arising from construction, Stone Crusher Units, Hot Mix Plants,	Vehicular Emission, Dust arising from construction, Stone Crusher	Industrial units, Vehicular Emission, Dust arising from construction, Stone Crusher Units, Hot Mix Plants.	Industrial units, Vehicular Emission, Dust arising from construction, Stone Crusher Units, Hot Mix Plants,	Vehicular Emission, Dust arising from construction, Stone Crusher Units, Hot Mix Plants, DG Sets.	Vehicular Emission, Dust arising from construction, Stone Crusher Units, Hot Mix Plants, DG Sets.

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	DG Sets.	Units, Hot Mix Plants, DG Sets.		DG Sets.		
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**(b) Identification of Gaps and Action Plan:**

S . N o .	Action Points	Indicative Action Plan	Responsible agency	Timeline for completion of action plan
1 .	Identification of prominent air polluting Sources?	Inventorization of air pollution Source in the district.	SPCB in co-Ordination with District Administration Forest & Environment Department	1 year.
2 .	Ambient Air quality data?	Ambient air quality data available i the website: <a href="http://www.spcb.sikkim.gov.i">www.spcb.sikkim.gov.i</a>	SPCB	Regular activity.
3 .	Setting up of Continuous Ambient Air Quality Monitoring Station	Continuous Ambient Air Quality Monitoring Station has been installed at Zero Point, Gangtok.	SPCB with District Administration	1 Year
4 .	District Level Action Plan for Air Pollution	District Level Action Plan shall be prepared as per the guidelines of CPCB and MoEF&CC for the state.	SPCB in Coordination with District Administration	1 Year
5 .	Hotspots of air pollution in District	1. The entire state of Sikkim has been notified as Air Pollution Control Area vide Gazette Extraordinary no. 506 dated 08/09/2011. 2. Burning of waste	SPCB in Coordination with District Administration	1 Year

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		(agricultural & Solid) has been banned vide Notification No. 191/FEWMD dated 05/01/2015. In case of non- Compliances byelaws have been Notified for imposition of fine from GPU level for the state.		
6	Awareness on Air Quality	Air quality index of the State is Readily available in the website: <a href="http://www.spcb.sikkim.gov.in">www.spcb.sikkim.gov.in</a> further planning shall be done for more Awareness.	District Adm. & SPCB	Regular activity.

**(viii) Water Quality Management Water Quality Monitoring**

**(a) Current Status Related to Water Quality Management**

Details of Data Requirement	Present Status						
	Gangtok & Pakyong		Mangan	Namchi		Soreng & Gyalshing	
	Rangphap Chu	9.2405	Rafom stream, Rang-Rang chu stream, Namdousa stream, Plum chu stream, Lachen stream	Kali Khola	8.2872		3.902
		6.49009		Rabi Khola	7.2664		4.102
		4.51173		Seti Khola	5.8539	Rani Khola	3.196
	Dikling Khola	7.49724		Hiu Khola	3.8544	Riyong Khola	4.721
	Pachey Khola	6.67376		Ralu Khola	5.7565	West	164
	Ralong Khola East	5.35410		Manpur Khola	12.758	Ribdi Khola	11.69
	Kue Chu	5.79453		Tangsang	1.8348		5.134
	Nathang Chu	9.03972		Bhari Khola	4.1130		5.235
	Lungze Chu	12.9279		Rungdung	2.0222	Kali Khola	4.479
	Rongni Chu or Rani Khola	27.6725		Dong Khola	3.8850	Lingsur Khola	6.904
	Taksam Chu	13.8142		Rinji Khola	5.8911	West	165
	Rora Chu	18.7383		Pokche Khola South	4.8414	Pale Khola	8.393
	Martam Khola	5.16481		Chimche Khola South	2.3255	Rangsang Khola West	8.087
	Sang Khola	6.63205			78	Hi Khola West	139
	Pagla Khola	4.34276				Dentam Khola West	5.503
						200	
				Torl Khola	3.1262	Bega Khola	8.383

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Rangchang Khola	6.66589	Kanam Khola	4.2686	Dhap Chhu	7.536
Ghatte Khola	5.0754	Kalej Khola	9.3900	Yangsa Chhu	5.594
Samdong Chu	5.10133	Pagla Khola	4.03633	Heri Khola	7.372
Lay Khola	3.64477		2.55502	Nambu Khola West	4.947 928
Rani Khola	5.56974	Papung Khola	7.26658	Taphel Khola	4.606
Liyung Kyong	2.72929	Rayong Khola	5.67638	Chisung Khola	2.471
Malten Chu	3.26286	Ranglo Khola	4.83117	Prek Chu	2.075
Richu Khola	4.21464	Ramek Khola	3.84401	Choktsering	18.67
Chhatrey	2.90699	Ringpi Chu	8.01343	Rungji Chhu	6.926
Chhito Khola	2.46797	Rangpo Khola	11.8927	Koklung Chhu	6.117
Rare Chu	2.67466	Bania Khola	5.75364	Sano chhange	2.547
Navey Chhu	3.84467	Sangrung Khola	6.74403	Andheri Khola	5.382
Rankey Chhu	3.09085	Chil Khola	6.65559	Namphe Khola	1.597
Soge Chu	3.63595	Bermeli Khola	6.59290	Richu Khola	4.007
Subaney khola	6.34347	Raphu Khola	5.45100	Ralong Khola	6.564
Hante Khola	5.44508	Niya Khola	3.73424	Selele Khola	3.543
Di Chhu	8.66352	Kau Khola	6.62165	Arithang Chu	2.149
Lingtam	3.67578	Lungdung Chu	5.82629	Lah chu	3.050
Khari Khola	3.05630	Karsangla Chu	6.18615	Bechulangpa	1.361
Chunabhatti	4.03846	Rangit Chu	11.6279	Reshi khola	4.052
Sawa Khola	3.23520	Barshe Chhu	4.68948	Aksu khola	2.651
Kali Khola	2.36558	Phong Khola	2.74905		1.974
Kayong or	2.16803	Tiri Khola	3.90286		1.766
Rongdu Khola	4.05733	Pao Khola	3.01962		2.086
Chhuba Khola	4.12581	Ranka Khola	4.98506		2.801
Re chu	8.05263	Kali Khola	1.91352		
Ramitey or	5.29719	Chaure Khola	1.87831		
Yali chu	6.67659		3.00192		
Chhange chu	2.43776	Brum Khola	3.15870		
Sano chhange	2.54756	Majuwa Khola	5.58277		
Andheri Khola	5.38212	Seti Khola	3.06642	Chhange khola	3.054

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Namphe	1.59795	Andher Khola	1.36520	Sigeng Khola West	6.869 404
Richu Khola	4.0074	Kamrang Khola	4.05844		2.878
Ralong Khola	6.56415		4.46656		72
Selele Khola	3.54344	Daring Khola	2.69512		1.931
Arithang Chu	2.14956	Kali Khola	1.99518		2.335
Lah chu	3.05099		10.1199	Pareng Khola West	2.134 619
Bechulangpa	1.36100	Rangdang Chu	2.31679	Mardom Khola West	2.477 253
Reshi khola	4.05267			Pharik Khola	3.576
Aksu khola	2.65115			Barmo Khola	3.934
	1.974			Lungman Khola West	3.768 423
	1.76669			Thar Khola West	5.563 501
	2.08625			Chhamam Chhu West	4.990 884
	2.80122			Pongmirang Chhu West	7.479 933
Chhange	3.05462			Phamrung Chhu West	8.498 266
Thekabong	3.79546				
Gop chu	2.56541			Thekabong	3.795
Buthang khola	2.96348			Gop chu	2.565
Simana khola	3.58023			Buthang khola	2.963
Rishi khola				Simana khola	3.580
Danak khola	4.200068			Rishi khola	
				Danak khola East	4.200 068
				Simchar Khola West	6.593 134

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Length of Coastline(if any)	NA	NA	NA	NA
Nalas/Drains/Creeks meeting Rivers	13 (In Gangtok)	3	NA	NA
Lakes/Ponds	234.2575 (Gangtok) 30-199.5 (Pakyong)	NIL	NIL	139.8917
Total Quantity of sewage from towns and cities in the district	20.86 MLD (Gangtok) 20.526 MLD (Pakyong)	0.6 MLD	NA	NA
Quantity of industrial waste water	1.776 MLD (Gangtok)	NIL	NA	NA
Percentage of untreated sewage	NIL	100 % sewage are collected in the individual household septic tank	NA	No untreated sewage discharged. All household having septic tank.



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details of bore wells and number of permissions given for	11 (Gangtok)	NIL	NIL	NA
Groundwater polluted areas if any	NIL	NIL	NA	NA
Polluted river stretches if any	Adarsh Goan to Melli in the Melli – Chungthag polluted stretch. Namli to Singtam stretch in Rani Chu polluted stretch.	Chungthag-Teesta	NA	1

**(b) Identification of Gaps and Action Plan for Water Quality Monitoring**

S · N o ·	Action Points	Action Plan	Responsible Agency	Timeline for Completion of Action Plan
1	Inventory of water bodies	<ol style="list-style-type: none"> <li>1. Inventory of water bodies is being monitored by Department of Forest &amp; Environment. SPCB-Sikkim conducts regular monitoring of river water quality under the NWMP program and the analyzed data is available in the SPCB website.</li> <li>2. River Rejuvenation Committee has been notified as the State Nodal agency to ensure compliance to the environmental norms and monitor the actions of the implementing departments. RRC is also undertaking the Inventorization of water bodies.</li> </ol>	Department of Forest & Environment, SPCB-Sikkim, Department of Water Resources & River Development, Department of Public Health & Engineering	Continuous activity
2	Quality of water bodies in the district	<ol style="list-style-type: none"> <li>1. SPCB Sikkim has been continuously monitoring the industrial activities by ensuring continuous operation of Effluent Treatment Plant (ETP). Further, SPCB Sikkim has made Zero Liquid Discharge (ZLD) mandatory so that the treated water meeting the prescribed standard is recycled and reused for gardening, flushing, cleaning and cooling purposes.</li> <li>2. Conducted by SPCB-Sikkim.</li> </ol>	SPCB-Sikkim	Continuous activity
3	Hotspots of water contamination	RRC has been setup and report for delisting of the 4 identified river stretches in Gangtok district has been submitted to the CPCB.	Department of Forest & Environment, SPCB-Sikkim, Department of Water Resources & River	Continuous activity

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			Developme nt	
4	Protecti on of river/la ke water front	Action plan prepared and bye laws have also been notified for implementation for the state.	District Administrat ion, SPCB UDD RDD Forest & Environme nt.	Continuous activity
5	Inventor y of sources of water polluti on	Prepared	Forest & Environme nt, SPCB	Continuous activity
6	Oil spill disaster manag ement (for coastal districts)	N/A	N/A	N/A
7	Protecti on of floodpla ins	N/A	N/A	N/A
8	Rejuven ation of ground water	<ol style="list-style-type: none"> <li>1. Ground water abstraction for domestic purposed is not practiced in any of the districts over the state.</li> <li>2. Industrial units who have installed bore wells have obtained NOC from Central Ground Water Authority (CGWA)</li> <li>3. In order to prevent future challenges in the district due to natural and manmade disruptions, rejuvenation of groundwater must be considered.</li> </ol>	Department of Forest & Environme nt, Department of Water Resources & River Developme nt, CGWA	Continuous activity
9	Complai nt's redressal system	Available at District Administration and SPCB- website	District Adm. & SPCB	Continuous activity

**(ix) Domestic Sewage****(a) Current Status Related to Domestic Sewage**

Details of Data Requirement	Present Status					
	Gangtok	Pakyong	Mangan	Namchi	Soreng	Gyalshing
No of Class-II towns and above	Nil	-	NA	Data NA	NIL	NIL
No of Class-I towns and above	1	NIL	NA	Data NA	NIL	NIL
No of Towns STPs installed	5(Gangtok & Singtam)	1	NA	1	NIL	NIL
No of Towns needing STPs	1 – Gangtok Zone III(under construction at Tathangchen area-3.25 MLD)	4	2	2	NIL	2
No of ULBs having partial underground Sewerage network	5(Gangtok & Singtam)	1	NA	Data NA	NIL	NIL
No of towns not having sewerage network	NIL	3	2	2	NIL	2

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Total Quantity of Sewage generated in District From Class II cities and above	20.86 MLD	4.4MLD	Class II cities not present in the district.	Class II cities not present in the district	NIL	Class II cities not present in the district
Quantity of treated sewage flowing into Rivers(directly or indirectly)	12.52MLD(60% only)	1.4MLD	NA	All households are required to construct a septic tank for sewage management. In implementation of Swacch Bharat Mission Gramin Phase II installation of septic tanks for individual households in 64 villages are under process. .	In implementation of Swacch Bharat Mission Gramin Phase II majority of households in rural areas have been equipped with twin pit septic tank for sewage management. Mobile septage treatment units have been made available by RDD under Swacch Bharat Kosh.	NA

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					6 MST units for the district provided by the RDD.	
Quantity of untreated or partially treated sewage (directly or indirectly)	NIL	3.0MLD (septic tank treatment)	1.6MLD	NA	NA	NA
Quantity of sewage flowing into lakes	NIL	NIL	NA	NA	NA	NA
Total available Treatment Capacity	20.86MLD	1.4MLD	NA	NA	NA	NA

**(b) Identification of Gaps and Action Plan for Treatment of Domestic Sewage:**

S . N o .	Action Points	Action Plan	Responsible Agency	Timeline for Completion of Action Plan
1	Sewage Treatment Plants (STPs)	<ol style="list-style-type: none"> <li>Total 8 STPs have been set up in the state. Gangtok-5, Rangpo-1, Singtam-1, Melli-1.</li> <li>STPs located in Rangpo, Singtam &amp; Melli has been damaged by flash flood of October 2023. Temporary pits have been constructed to receive the sewage. Treatment of sewage is done through anaerobic actions. Proposal to restore the STPs has been forwarded to the authority for</li> </ol>	Public Health & Engineering Department	2028

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		<p>approval and sanction.</p> <p>3. Following STPs has been proposed in other areas of the state namely Jorethang, Namchi, Chungthang, Mangan, Rabong, Geyzing &amp; Soreng.</p> <p>4. 1 additional STP is nearing completion at Gangtok Zone III, Tathangchen.</p>		
2	Underground Sewerage Network	<p>1. PHE department is in process of covering uncovered household and commercial establishment to underground sewerage network in and around Gangtok city and Singtam town.</p> <p>2. Underground sewerage network for Mangan and Chungthang is being constructed under the NRCD. The work has been tendered and work order issued.</p> <p>3. Only 1 town has been partially covered with underground sewerage network in the Pakyong district.</p> <p>4. Proper underwater sewerage network to be mapped for all the remaining districts. All old SW networks to be checked and maintained.</p> <p>5. If possible, digitization of maps and documents.</p> <p>6. Clogging and overflowing of drains to be checked.</p>	Public Health & Engineering Department	2028

**(x) Industrial Waste Water Management****(a) Current Status related to Industrial Waste Water Management**

Present Status	Gangtok	Pakyong	Mangan	Namchi	Soreng	Gyalshing
Number of Red, Orange, Green and White industries in the district	There is a total of 9 (Red), 126 (Orange) and 68 (Green) Industries operating in the state					
No of Industries discharging wastewater	Nil	Nil	Nil	Nil	Nil	Nil
Total Quantity of industrial waste water generated	0.578 MLD	1.339 MLD	Nil	0.979 MLD	Nil	Nil
Quantity of treated industrial waste water discharged into Nalas/ Rivers	NIL	Nil	Nil	Nil	Nil	Nil
Common Effluent Treatment Facilities	NIL	NIL	Nil	Nil	Nil	Nil
No of Industries meeting Standards	-	All complaint	NA	Nil	Nil	Nil
No of Industries not meeting discharge Standards	NIL	Nil	Nil	Nil	Nil	Nil



**(b) Identification of Gaps and Action Plan for Industrial Waste Water:**

S · N o ·	Actio n Point s	Action Plan	Responsible Agency	Timelin e for Comple tion of Action Plan
1	Comp liance to discha rge norms by Indust ries	<ol style="list-style-type: none"> <li>1. Industrial units' namely pharmaceutical industries have installed Online Continuous Effluent Monitoring System as per the directions of the SPCB. So that real time compliance to pollution parameters can be verified remotely.</li> <li>2. Industries of various categories are inspected by SPCB on timely basis as specified by the CPCB category wise viz., Red, orange, green.</li> <li>3. Zero liquid discharge system has been installed in almost all medium to large pharmaceutical units in the state.</li> <li>4. CCTV is installed in all storm water outlets of the pharmaceutical industries and footage is submitted to SPCB on weekly basis. Third Party Environmental Monitoring is on conducted quarterly basis by NABL accredited laboratories under supervision of SPCB and the reports are submitted as well.</li> </ol>	Dept. of Forest & Environment, State Pollution Control Board.	Continuo us Activity

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2	Complaint redressal system	Available at District Adm. website and SPCB Sikkim Website	District Adm. & SPCB- Sikkim	Continuous activity
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**(xi) Mining Activity Management Plan****(a) Current Status related to Mining Activity Management**

Details of Data Requirement	Existing Mining Operations					
	Gangtok	Pakyong	Mangan	Namchi	Soreng	Gyalshing
Type of Mining Activity	Temporary collection of loose boulders, sand & stone	NA	No mining activities in the district	Temporary collection of loose boulders, sand & stone	Temporary collection of loose boulders, sand & stone	Temporary collection of loose boulders, sand & stone
No of licensed Mining operations in the district	70	NA	NA	32	9	3
% Area covered under mining in the district		NA	NA	0.0021%		NA
Area of Sand Mining	964 sq. km	NA	NA		98200 Sq. ft	NA
Area of sand Mining	River reserves	NA	NA	River reserves	River reserves	River reserves

**(b) Identification of Gaps and Action Plan:**

S.No	Action Points	Action Plan	Responsible Agency	Timeline for Completion
1	Monitoring of Mining activity	<ol style="list-style-type: none"> <li>1. Strict and timely monitoring of any illegal and other mining activities to be conducted.</li> <li>2. In coordination with SPCB (Forest and Environment Department) and District Administration.</li> <li>3. District Expert Appraisal Committee has been formed.</li> </ol>	Department of Mines & Geology SPCB (Forest and Environment Department) and District Administration	Continuous activity

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2	Inventory of illegal mining if any mining	<ol style="list-style-type: none"> <li>1. Action plan to identify illegal sand and other mining activity in the district through surveillance, patrolling and enforcement.</li> <li>2. District Level task Force may be constituted for control of illegal mining activity.</li> </ol>	Department of Mines & Geology, Forest & Environment Department, SEIAA/SEAC.	Continuous process
3	Environmental compliance by Mining industry	Action plan for periodic verification of compliance to environmental conditions stipulated by SPCBs/PCC, MoEF & C, Department of Mines etc. SPCBs/PCC maybe involved in this activity.	Department of Mines & Geology, Forest & Environment Department.	Continuous process

**(xii) Noise Pollution Management Plan****(a) Current Status related to Noise Pollution Management**

Details of Data Requirement	Measurable Outcome					
	Gangtok	Pakyong	Mangan	Namchi	Soreng	Gyalshing
No. of noise measuring devices available with various agencies in district	SPCB Sikkim – 7 nos.	SPCB Sikkim – 7 nos.	SPCB Sikkim – 7 nos.	SPCB Sikkim – 7 nos.	SPCB Sikkim – 7 nos.	SPCB Sikkim – 7 nos.

**(b) Identification of Gaps and Action Plan:**

S.No.	Action Points	Action Plan	Responsible Agency	Time line for Completion of Action Plan
1	Availability of Sound/Noise Level Meters.	<ol style="list-style-type: none"> <li>1. Regulation of Statutory Regulatory guidelines to be planned considering noise sensitive zones.</li> <li>2. Scientific research focusing on noise pollution in different types of environments and proposing different types of solutions to address the problem.</li> <li>3. Procurement of Sound/noise level meters in process in all the districts.</li> </ol>	District Administration, Police Department & SPCB-Sikkim	2025
2	Ambient Noise Level Monitoring.	<ol style="list-style-type: none"> <li>1. Control at source</li> <li>2. Control in the transmission path</li> <li>3. Using protective equipment</li> <li>4. Various sensitive zones such as protected areas, hospitals, etc., have been declared as silent zones.</li> <li>5. Noise monitoring during festival season is conducted by SPCB-Sikkim</li> </ol>	UDD, District Administration, Police Department & SPCB-Sikkim	2025

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3	Signboard installation	<ol style="list-style-type: none"> <li>1. Mandatory signboards with increased number and size displayed at prominent sites.</li> <li>2. District administration may ensure that adequate number of sign boards installed at sensitive zones in towns / cities in towns and cities. An action plan may be prepared by district authority.</li> </ol>	District Administration	2025
4	Complaint redressing system	<ol style="list-style-type: none"> <li>1. Redressal portal has been set up in District Adm. &amp; SPCB website</li> <li>2. <a href="https://soreng.nic.in/">https://soreng.nic.in/</a></li> <li>3. <a href="https://police.sikkim.gov.in/">https://police.sikkim.gov.in/</a></li> <li>4. <a href="https://spcb.sikkim.gov.in/">https://spcb.sikkim.gov.in/</a></li> </ol>	UDD, District Administration, Police Department & SPCB-Sikkim	Routine activity