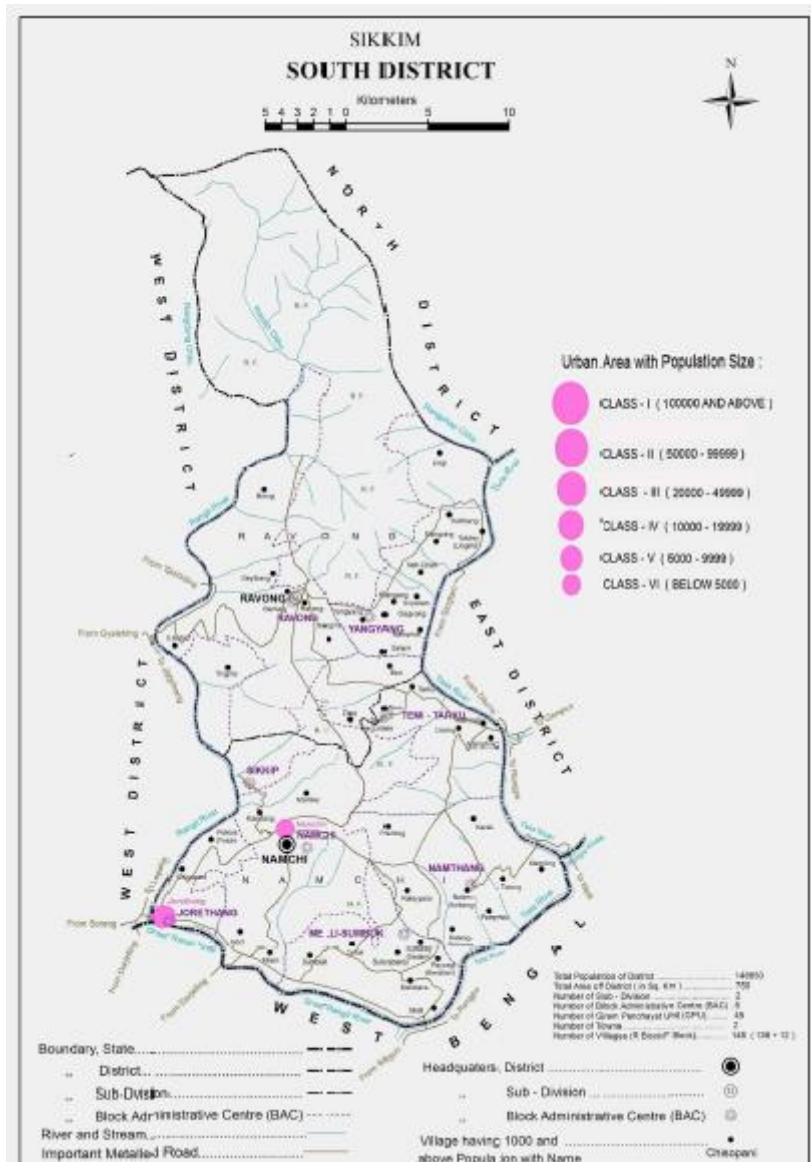


District Environment Plan for South District

State of Sikkim



Source: Census, 2011



Office of District Administration
District Collector, South District
District Administrative Centre, Namchi, South Sikkim
E-Mail: namchisd@gmail.com

District Environment Plan [South]

District Profile.....	4
a. District Administrative Set-up	4
b. Natural Resources.....	4
c. Geography & Demography	4-5
d. Land-use pattern.....	5-6
e. Climate.....	7
2.0 Indicative Gap Analysis and Action Plans for complying with Waste Management Rules	7
(i) Solid Waste Management	7
a. Current status related to solid Waste management.....	7
b. Identification of gaps and Action plan	8-13
(ii) 3	
(a) Current status related to Plastic waste management	14
(b) Identification of gaps and Action plan.....	14-16
(iii) C & D Waste Management	16
▪ a. Current status related to C & D Waste	16
b. Identification of gaps and Action plan	16-17
(iv) Biomedical Waste Management	18
a. Current Status related to biomedical waste	18
b. Identification of gaps and Action plan	18-19
(v) Hazardous Waste Management.....	20
a. Current Status related to Hazardous Waste Management	20
b. Identification of gaps and action plan	21-23
(vi) E-Waste Management.....	24
a. Current Status related to E-Waste Management	24
b. Identification of gaps and action plan	24-25
Air Quality Management.....	25
a. Current Status related to Air Quality Management.....	25
b. Identification of gaps and action plan	26
Water Quality Management	27
Water Quality Monitoring.....	27-30

a. Current Status related to Water Quality Management.....	27-30
b. Identification of gaps and action plan for water quality monitoring	30-31
Domestic Sewage	31
a. Identification of gaps and action plan for treatment of domestic sewage.....	31-32
b. Identification of gaps and action plan for treatment of domestic sewage	32
Industrial wastewater management	33
a. Current Status related to Industrial Wastewater Management	33
b. Identification of gaps and action plan for industrial wastewater:	33-34
Mining Activity Management plan	34
a. Current Status related to Mining Activity Management.....	34
b. Identification of gaps and action plan	35
Noise Pollution Management plan	36
a. Current Status related to Noise Pollution Management.....	36
b. Identification of gaps and action plan	36

District Profile

South District of Sikkim lies at an altitude of 400 mtr to 2000 mtr with unique and countryside escape of endless waves of agricultural fields and the terraced slopes, intercepted by spring patched forests and encompasses a total area of around 75000 hectares. Area wise, it is the smallest district of Sikkim and population-wise, second one. Its total population is 1,46,742 (as per 2011 census) among which 76,663 are male and 68,241 female. Namchi or Namtse (meaning Sky High) is the headquarter of South Sikkim, which is nestled among the hills having elevation of 5500 fts and which commands panoramic view of snowcapped mountains and vast stretches of valley. Namchi is around 78 km away from the capital Gangtok and is the closest major Sikkim city to Siliguri (around 85 km), which is gateway to enter in Sikkim from West Bengal. The nearest railway station is New Jalpaiguri (NJP) (around 105 km) and nearest Airport is Bagdogra (around 110 km) from Namchi. The Melli check post is the entry point to South District from West Bengal. The district is known for fastest growing industrial area.

a. District Administrative Set-up

Namchi and Ravangla are sub-divisions of the district and Namchi, Jorethang, Melli and Ravangla are important towns. Kitam Bird Sanctuary, which is around 14 km from Namchi at an altitude of 2200 ft, is the only low altitude sanctuary in Sikkim, spread over 6 kms of area. South district has 8 Assembly Constituencies, 2 Municipal Councils, 14 Municipal Wards, 28 Zilla Territorial Constituencies, 48 Gram Panchayat Units and 283 Wards.

The district administration is headed by District Collector/District Magistrate and supported by Additional District Collector. Sub-divisional Officers as supporting magistrates and the heads of respective departments. The District Collector is responsible for maintenance of law and order, magistrate for various cases and is the chairman of district coordinating committee to monitor the functioning of all other departments as well.

b. Natural Resources: As per the assessment of 2019 by Forest Survey of India South Sikkim has the forest cover of 76.24% of its geographical area. The district has Protected Areas like Maenam Wildlife Sanctuary and Kitam Bird Sanctuary. It is well known for Sling Dong Faireanum Orchid Conservation Reserve.

c. Geography & Demography: South district is the least (750 sq. km.) in area but in term of population and literacy rate is positioned the second highest with (146,850) and (81.42) per cent in the district level during 2011 census. South district also recorded the second highest proportion of scheduled caste (6,053) and third highest in Scheduled Tribes (41,392) population in 2011 census.

‘Chardham’ is a unique Pilgrim Centre showcasing all the existing four Dhams i.e., Badrinath, Jagannath, Dwarka and Rameshwar. This unique Pilgrim Centre has a main temple of 108 feet height on which is based the 87 feet high statue of Lord Shiva on the sitting posture at the top of Solophok Hill. Apart from Shiva statue, this Pilgrim Centre also has replicas of the twelve Jyotirlingas to offer at one platform for Shiva devotees. The only and the famous Tea Estate of

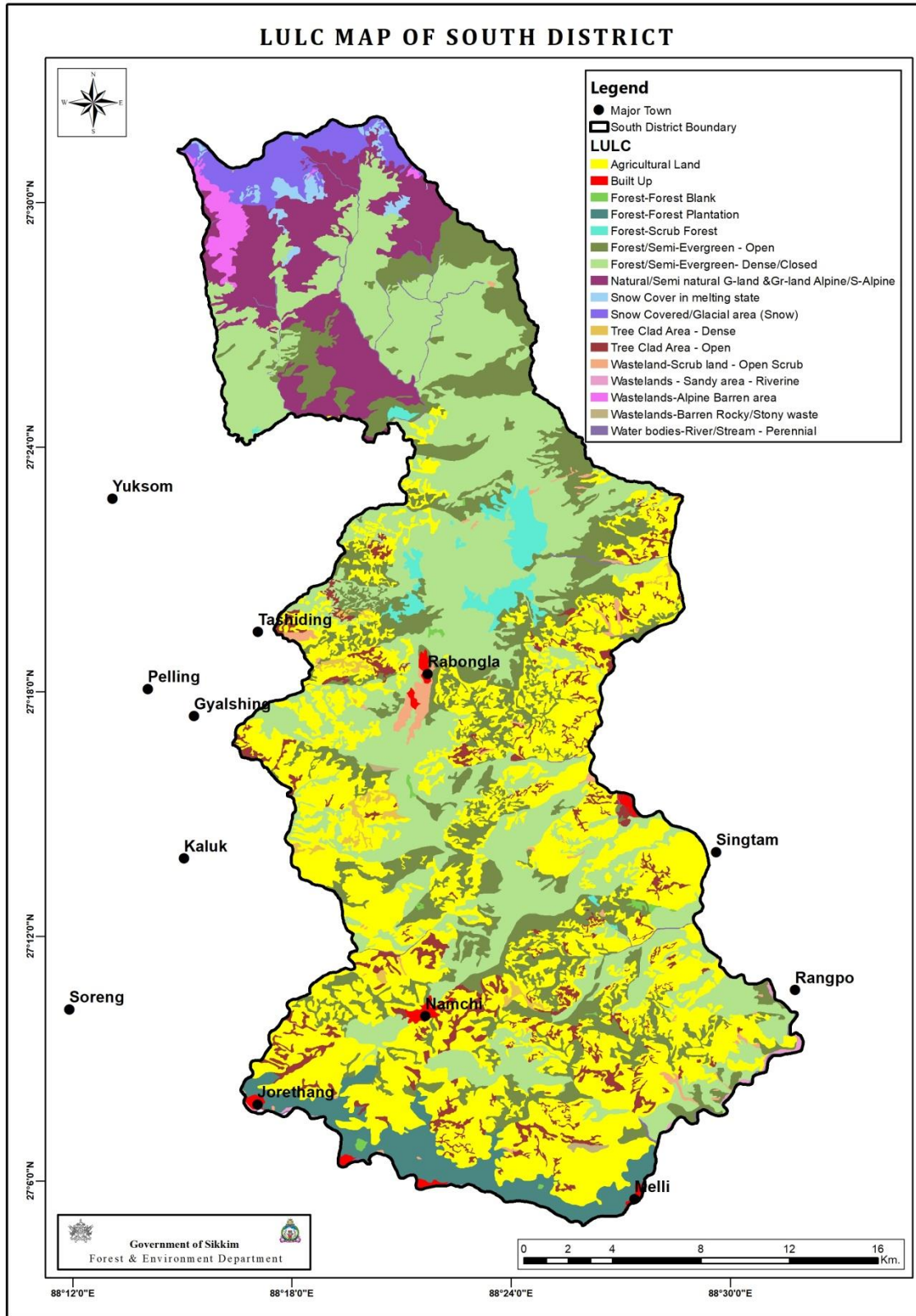
the Sikkim state the "Temi Tea Estate" considered one of the best in India and world top 18 quality organic tea is produced here using organic biofertilisers such as cattle manure and composite manure.

The table shows decadal change in population for South District.

1.	Area	75000 Hectors
2.	Population	1,46,850 (2011 census)
3.	Rural Population	1,25,651
4.	Urban Population	21,199
5.	Decadal Growth Rate	11.65%
8.	Sex Ratio	914
11.	Literacy Rate	81.4 %

d. Land-use pattern:

Geographical Area	75000 Hectares
Area Under Forest Cover	52900 Hectares
Net Sown Area.	21740 Hectares
Cropped Area	38581 Hectares
Area Irrigated	5245 Hectares



e. Climate: South Sikkim observes temperate climate for most of the time with average annual rainfall of 162.5 cms. Maximum temperature recorded so far on the average is 17-27 Degree Celsius and minimum is 02-21 Degree Celsius. The district falls under Eastern Himalayan Region (II) Agroclimatic zone.

2.0 Indicative Gap Analysis and Action Plans for complying with Waste Management Rules

(i) Solid Waste Management

a. Current status related to Solid Waste management:

Sl. No.	Urban Local bodies	No of Wards	No of Households	Population	Solid Waste Generated per day
1	Municipal corporations (Nagar Nigam or Mahanagar Palika)	-	-	-	-
2	Municipalities (Nagar Palikas)	7	3860	13503	4.0 TPD*
3	Nagar Panchayats (Town area Councils)	5	2107	11286	5.0 TPD*

*As per annual report 2020-21

Sl. No.	Local Bodies	No of Village panchay ats /Blocks	No of Households	Population	Solid Waste Generated per day
1	Block /Taluk / Mandal Tehsils	8	23,327	1,35,003	7.815** TPD
2	Village/Gram Panchayats	150			

** As per annual report 2020-21

b. Identification of gaps and Action plan:

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
1.	Segregation				
(i)	Segregation of waste at source	80% at Nayabazar-Jorethang Nagar Panchayat(N JNP) 70% at Namchi Municipal Council(NMC)	Conducting IEC to each ward of the ULB. Blue & green coloured bins have been provided to segregate dry & wet waste. Awareness programme among the local people.	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	Continuous process
2.	Sweeping				
(i)	Manual Sweeping	100% covered by manual sweeping. Shortage of man power to some extends	Recruitment of labour when fund is available	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	Continuous process

District Environment Plan [*South*]

(ii)	Mechanical Road Sweeping & Collection	Not required.	NA	NA	NA
S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identificatio n of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
3	Waste Collection				
(i)	100% collection of solid waste	No gaps	Prepared and Notified vide Govt. of Sikkim Gazette Notification no. 4/UD&HD dated 29/04/2019	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	Continuous process
(ii)	Arrangement for door to door collection	90% . However, less effective for collection from areas far from the road side.	Specified in the action plan. a) Identifying uncovered areas. b) Planning to install huge bins to those uncovered areas	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	Continuous process

District Environment Plan [*South*]

(iii)	Waste Collection trolleys with separate compartments	Not required	Garbage vehicles have been provided for door to door collection service.	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	Continuous process
(iv)	Mini Collection Trucks with separate compartments	Currently no trucks of such specifications are available. Required	Procurement list has been submitted to UDD. Govt. of Sikkim	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	Depending upon the acceptance of the proposal.
(v)	Waste Deposition centres (for domestic hazardous wastes)	Not available due to unavailability of land	Specified in the action plan. SPCB-Sikkim has donated separated labeled DHW collection bins to authorities for use during waste collection.	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	Continuous process
4.	Waste Transport				
(i)	Review existing infrastructure for waste Transport.	Trucks with separate compartments are required	Procurement list has been submitted to UDD. Govt. of Sikkim	Urban Development Department, Rural Development Department, District Administration, Block Administrative	Continuous process

District Environment Plan [*South*]

				Centres, Gram Panchayat Units.	
(ii)	Bulk Waste Trucks	Available but not adequate	Acquisition for truck has been initiated	Urban Development Department,	1 year
(iii)	Waste Transfer points	Not required	NA	NA	NA
5	Waste Treatment and Disposal				
(i)	Wet-waste Management: On-site composting by bulk waste generators (Authority may decide on requirement a s per Rules)	Not available	Shall be installed if necessary after survey and identification	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	
(ii)	Wet-waste Management: Facility(ies) for central Biomethanation / Composting of wets waste.	Not availa ble	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. Not required for ULBs in current scenario.	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres	
(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	ULB does not have MRF facillity. All dry waste waste sold to <i>kabbadiwa- llas.</i>	Specified in the action plan..The Rural Development Department has selected 2 Divisions in the district and 4 GPUs Namthang, Sumbuk, Sikip and Yangang as model villages for compliance to the directions of	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres,	

District Environment Plan [South]

			Hon'ble NGT in the matter of 606/2018. Setting up of RRC in all blocks is under process. Selection of RDF firm for the state is under process by UDD, Govt. of Sikkim Inadequate funds for setting up MRF in ULBs.	Gram Panchayat Units.	
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	Dumpsite located at Sipsu. Currently the State Government is under process to convert the same into a sanitary landfill facility	Under process. The Rural Development Department has selected 2 Divisions in the district and 4 GPUs Namthang, Sumbuk, Sikkip and 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	Urban Development Department, Rural Development Department,	
(v)	Remediation of historic / legacy dumpsite	yes	Selection of Bio-mining firm for remediation under process.	Urban Development Department	
(vi)	Involvement of NGOs	Involved	Planning to envisage NGOs for campaigning SWM more frequently	Urban Development Department, Rural Development Department,	Continuous Process
(vii)	EPR of Producers: Linkage with Producers / Brand Owners	Till date no plastic waste collection centre has set up by brand owners in the district or has submitted proposal of such kind.	The SPCB-Sikkim has initiated registration of single use plastic manufacturers and producers in the state as per the new SOP prepared by CPCB. Licensing authorities have been directed to prepare inventory of brand owners of authorized dealers	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, State Pollution Control Board-Sikkim.	Continuous process

(viii)	Authorisation of Waste Pickers	Yes	Information available with MEO, Geyzing, Nayabazar-Jorethang & Namchi.	Urban Development Department, Rural Development Department, Block Administrative Centres	Completed
(ix)	Preparation of own by-laws to comply with SWM Rules 2016	Yes	Prepared and Notified vide Govt. of Sikkim Gazette Notification no. 5/UD&HD dated 29/04/2019	Urban Development Department & Rural Development Department	Completed

Note : “State Policy and Strategy on Solid Waste (Action Plan)” and “Bye- laws of solid waste Management & Handling cleanliness and sanitation for urban sector in Sikkim” has been enclosed as Annexure I & II respectively

(i) Plastic waste Management

a) Current status related to Plastic waste management

Sl. No.	Urban Local bodies	Estimated quantity of Plastic Waste Generated per day
1	Municipal corporations (Nagar Nigam or Mahanagar Palika)	
2	Municipalities (Nagar Palikas)	40 kg/day*
3	Nagar panchayats (Town area Councils)	4.1 kg/day*

SL. No.	Local Bodies	Plastic Waste Generated per day
2	Block /Taluk / Mandal Tehsils	Not provided
3	Village/Gram Panchayats	Not provided

*As per the annual report 2020-21

b) Identification of gaps and Action plan:

S.No.	Action points For village panchayats/ blocks/ municipalities / corporations	Identificati on of gap	Action plan	Agencies Responsible	Target timefor Compliance
1.	Door to Door collection of dry waste including PW	Collection of garbage by vehicles on daily basis along the road side. However, less effective for collection from areas far from the road side.	Initiation of collection using bag packers from the areas away from the road side. Awareness in different pockets in ward level.	Urban Development Department, Rural Development Department, District Administration, Block Administrative Centres, Gram Panchayat Units.	Continuous process.
2.	Facilitate organised collection of PW at Waste transfer point or Material Recovery Facility	All dry waste is trasported to dumpsite located in Sipsu. <ul style="list-style-type: none"> material recovery facility available Involvement of informal sector / NGO initiated and under process Registering waste pickers under process Till date no plastic waste collection centre has 	Ban of sale and use of plastic carry Bags have been notified in Urban and rural areas. Bulk quantity of plastics is generated from packaging material of consumer goods. Ban on burning of waste has been notified. Ban on use of packaged during water in government function/ meetings have been notified. Ban on Sale and Use of Styrofoam products/cutlery has been notified.	Urban Development Department, Rural Development Department, Forest & Environment Department District Administration, Block Administrative Centres, Gram Panchayat Units.	Continuous process.

District Environment Plan [*South*]

		set up brand owners in the district or has submitted proposal of such kind.			
3.	PW collection Centres	Till date no plastic waste collection centre has set up by brand owners in the district or has submitted proposal for EPR of such kind to the authorities.	The SPCB-Sikkim has initiated registration of single use plastic manufacturers and producers in the state as per the new SOP prepared by CPCB. 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	Urban Development Department, Rural Development Department	
4.	Awareness and education programs implementation	Continuous process	Conducted by SPCB-Sikkim in coordination with UDD, RDD, MSME, Krishi Vigyan Kendra and District Authorities.	Urban Development Department, Rural Development Department, Forest & Environment Department District Administration, Block Administrative	Continuous process

District Environment Plan [*South*]

			Street plays conducted, videos and jingles have also be released by SPCB-Sikkim	Centres, Gram Panchayat Units.	
5.	Access to Plastic Waste Disposal Facilities	Yes	Located at west Bengal. Recycling facilities for plastic waste has not been set up in the state	Urban Development Department, Rural Development Department	

(iii) C&D Waste Management

a. Current status related to C & D Waste

Details of Data Requirement	Present Status
Total C & D waste generation in MT per day (As per data from Municipal Corporations / Municipalities)	Not available
Does the District has access to C&D waste recycling facility?	No

b. Identification of gaps and Action plan

S. No.	Action points for blocks/town municipalities/City corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	Arrangement for separate collection of C&D waste to C&D waste deposition point.	NA	NA	NA	NA

District Environment Plan [*South*]

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?	NA	NA	NA	NA
3.	C&D recycling Facility	NA	NA	NA	NA
4.	Usage of recycled C&D waste in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads	NA	NA	NA	NA
5.	ICE on C & D waste management	NA	NA	NA	NA

Note: Action plan on C&D waste has been prepared and is under process for approval. The details for the same shall be provided after final approval by the State Government.

(ii) Biomedical Waste Management**a. Current Status related to biomedical waste**

Inventory of BMW in the District	Quantity
Total no. of Bedded Healthcare Facilities	8
Total no. of non-bedded HCF	47
No. of HCFs authorized by SPCBs/PCCs	55
No of Common Biomedical Waste Treatment and Disposal Facilities (CBWTFs)	nil
Capacity of CBWTFs	NA
No. of Deep burials for BMW if any	41 nos.
Quantity of biomedical waste generated per day	78.169 kg/day
Quantity of biomedical waste treated per day	78.169 kg/day

b. Identification of gaps and Action plan:

S. No.	Action points for blocks/town municipalities/City corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	Inventory and Identification of Healthcare Facilities	No	Inventory has been prepared by SPCB and submitted to CPCB	Department of Health & Family Welfare, SPCB – Sikkim	Completed. The same shall be updated in the future if any changes occur.
2.	Adequacy of facilities to treat biomedical waste	No gaps. BMW generated in all HCFs undergo captive treatment within the facility itself	Proposal for CHWTSDF and CBWTF is in process. 90% payment for Land Acquisition completed.	Department of Health & Family Welfare, Department of Commerce & Industries SPCB – Sikkim	
3.	Tracking of BMW	No gaps	Currently all BMW generated in HCFs undergo captive treatment within the facility itself. The implementation of Barcode system is currently not required. The same	Department of Health & Family Welfare,	Continuous process

District Environment Plan [*South*]

			shall be implemented once the CBWTF is established & operational		
4.	Awareness and education of healthcare staff	No gaps	Capacity Building, awareness and training has been conducted for all healthcare workers to ensure proper management of BMW in the HCFs including COVID19 waste	Department of Health & Family Welfare, SPCB – Sikkim	Continuous process
5.	Adequacy of funds	Fund allocation has been specified in Action plan	Fund allocation has been specified in Action plan	Department of Health & Family Welfare,	Continuous process
6.	Compliance to Rules by HCFs and CBWTFs	Committee formed	Specified in Action plan	Department of Health & Family Welfare	Continuous process
7.	District Level Monitoring Committee	Committee formed along with Advisory body	Formation of the committee and advisory body notified by State Government	Department of Health & Family Welfare	Continuous process
8.	Wastewater Treatment	Required	Preparation of action plan has been communicated to implementing department	Department of Health & Family Welfare	Continuous process

Note: Action Plan on Bio-Medical Waste Management for the State of Sikkim (2019) has been attached as Annexure III

(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 & Transboundary 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 of HW generated in the state to TSDF & recycling plants in West Bengal and Cement Plants in Assam & Meghalaya]

Details of Data Requirement	Present Status
No of Industries generating HW	20
Quantity of HW in the district	419.69 MT
(i) Quantity of Incinerable HW	419.69 MT
(ii) Quantity of land-fillable HW	NIL
(iii) Quantity of Recyclable / utilizable HW	NIL
No of captive/common TSDF	NIL
Contaminated Sites or probable contaminated sites	NIL

b. Identification of gaps and action plan

S.No.	Action points	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	Regulation of industries and facilities generating Hazardous Waste	Completed	NA	SPCB	Complied
2.	Establishment of collection centres	none	All HW generated in the state is transported to : 1. West Bengal Waste Management Ltd., Haldia, West Bengal for incineration; 2. Calcom Cement, Assam for co-processing; and 3. Kundu Refinery, West Bengal for	SPCB-Sikkim, Occupier	Complied

District Environment Plan [South]

			recycling		
3.	Training of workers involved in handling / recycling / disposal of HW	None	The SPCB –Sikkim during grant of authorisation ensures that the Emergency Response Procedure has been prepared by the occupier. It has also been specified in the Specific conditions of the authorisation to ensure safety of the people handling HW, procure spillage kits and provide PPEs. Compliance to the provisions of the Hazardous Waste (Management & Transboundary Movement) Rules, 2016 and authorisation is verified in every inspection conducted by SPCB officials	SPCB-Sikkim, Department of Labour, Occupier	Complied
4.	Availability / Linkage with common TSDF or disposal facility	No gaps.	All HW generated in the state is transported to : 1. West Bengal Waste Management Ltd., Haldia, West	SPCB-Sikkim, Occupier	Complied

			Bengal for incineration; 2. Calcom Cement, Assam for co-processing; and 3. Kundu Refinery, West Bengal for recycling		
5.	Contaminated Sites	No gaps	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
Inventory of E-Waste in MT/year	Namchi Municipal Corporation & Nayabazar-Jorethang Nagar Panchayat submitted NIL report of E-Waste during 2020-21
Collection centers established by ULBs in the District	2 Nos.
Collection centers established by Producers or their PROs	NIL
No authorized E-Waste recyclers/Dismantler	NIL

b. Identification of gaps and action plan:

S. No.	Action points	Gaps in implementation	Action Plan	Responsible agency	Timeline for completion of action plan
1	Inventory / Generation of E-Waste / Bulk-waste generators	Inventory preparation has been delayed as many of the bulk consumers do not provide information	Information Education & Communication (IEC) Plan from Information Technology Department is awaited for completion of inventory.	Information Technology Department With SPCB.	
2	E-Waste collectionpoints	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	Only one(1) collection centre established by ULB in West District. Licensing authorities have been directed to prepare inventory of of authorized dealers in order to implement the ERP provisions of the E-waste Management Rules, 2016.	Namchi Municipal Council & Nayabazar Jorethang Nagar Panchayat. UDD.	
3	Linkage among Stakeholders to channelize E-Waste	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	All e-waste generated in the state is transported to Authorized recycling centre, M/s J.S. Pigments located in West Bengal	District Administration (West) Namchi Municipal Council & Nayabazar Jorethang Nagar Panchayat. UDD UDD.	
4.	Regulation of Illegal E-Waste recycling / dismantling	No such action has been observed or reported till date.	Regular monitoring by District Administration/UDD/RDD/SPCB	DA UDD RDD SPCB	Regular activity.

District Environment Plan [*South*]

5	Integration of informal sector	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.	IEC plan awaited from IT Department, Govt. of Sikkim.	UDD RDD	
6	Awareness and Education	None	Conducted by SPCB-Sikkim in coordination with UDD, RDD, MSME, NIELIT, Krishi Vigyan Kendra and District Authorities.	DA UDD RDD SPCB	Regular activity.

(vii) Air Quality Management

a. Current Status related to Air Quality Management

Details of Data Requirement	Present Status
Number of Automatic Air Quality monitoring stations in the district. - Operated by SPCB / State Govt / Central govt./ PSU agency : - Operated by Industry:	Nil
Number of manual monitoring States operated by SPCBs	2 nos. at Ravangla & Namchi
Name of towns / cities which are failing to comply with national ambient air quality stations	None
No of air pollution industries	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 , DG Sets.

b. Identification of gaps and action plan:

S. No.	Action points	Indicative Action Plan	Responsible agency	Timeline for completion of action plan
1.	Identification of prominent air polluting sources?	Inventorisation 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 in the website : www.spcb.sikkim.gov.in	SPCB	Regular activity.
3.	Setting up of Continuous Ambient Air Quality Monitoring Station	Proposal for setting up of Continuous Ambient Air Quality Monitoring Station shall be submitted in consultation with District Administration.	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.	SPCB in coordination with District Administration	1 Year
5.	Hotspots of air pollution in District	Burning of waste (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	SPCB in coordination with District Administration	1 Year
6.	Awareness on Air Quality	Air quality index of the State is readily available in the website : www.spcb.sikkim.gov.in 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	
Rivers name/ length in km	Khani Khola	4.208057
	Kali Khola	8.28725
	Rabi Khola	7.266455
	Seti Khola	5.853974
	Hiu Khola	3.85448
	Ralu Khola	5.756566
	Manpur Khola	12.758834
	Tangsang Khola	1.834892
	Bhari Khola	4.113066
	Rungdung Khola West	2.022259
	Dong Khola South	3.885091
	Rinji Khola South	5.891118
	Pokche Khola South	4.841446
	Chimche Khola South	2.325578
	Torl Khola South	3.126286
	Kanam Khola	4.268697
	Kapre Khola South	3.197242
	Kalej Khola South	9.390051
Seti Khola Near Dong Busty South	3.24003	
Pagla Khola	4.036335	

District Environment Plan [*South*]

		2.555026
	Papung Khola South	7.266584
	Rayong Khola South	5.676387
	Ranglo Khola South	4.831173
	Ramek Khola South	3.844019
	Ringpi Chu South	8.013432
	Rangpo Khola	11.892766
	Bania Khola	5.753646
	Sangrung Khola	6.744036
	Chil Khola	6.655599
	Bermeli Khola	6.592902
	Raphu Khola	5.451004
	Niya Khola	3.734244
	Kau Khola	6.621653
	Lungdung Chu	5.826292
	Karsangla Chu	6.186156
	Rangit Chu	11.627976
	Barshe Chhu	4.689483
	Phong Khola	2.749051
	Tiri Khola	3.902865
	Pao Khola	3.019623
	Ranka Khola	4.98506
	Kali Khola	1.913524
	Chaure Khola	1.878316
		3.001929

District Environment Plan [*South*]

	Brum Khola	3.158701
	Majuwa Khola	5.582777
	Seti Khola South	3.066422
	Andher Khola South	1.365207
	Kamrang Khola South	4.058447
		4.466564
	Daring Khola	2.695125
	Kali Khola	1.995189
		10.119913
	Rangdang Chu	2.316792
Source: Survey of India Toposheet.		
Length of Coastline (if any)	N/A	
Nalas/ Drains/Creeks meeting Rivers	Not Available	
Lakes / Ponds	nil	
Total Quantity of sewage from towns and cities in District	Information not available	
Quantity of industrial wastewater	Nil	
Percentage of untreated sewage	Information not available	
Details of bore wells and number of permissions given for extraction of groundwater	Nil	
Groundwater polluted areas if any	NA	
Polluted river stretches if any	Adarsh Gaon to Melli in the Melli-Chungthang polluted stretch and Jorethang to Triveni in the Rangit River NHPC Dam site to Triveni polluted stretch. As per the CPCB standard for having Bio Chemical Oxygen Demand more than 3mg/Ltr. Hence falling under	

	priority V category.
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b. Identification of gaps and action plan for water quality monitoring:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Inventory of water bodies	Inventory of water bodies is being monitored by Department of Forest & Environment. SPCB-Sikkim conducts regular monitoring of river water quality under the NWMP programme and the analyzed data is available in the SPCB website. 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 Inventorisation of water bodies.	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	Conducted by SPCB-Sikkim	SPCB-Sikkim	Continuous activity
3.	Hotspots of water contamination	RRC has been setup and report for delisting of the 4 identified river stretches has been submitted to the CPCB	Department of Forest & Environment, SPCB-Sikkim, Department of Water Resources & River Development	Continuous activity

District Environment Plan [*South*]

4.	Protection of river / lake water front	Action plan prepared and bye laws have also been notified for implementation.	District Adm SPCB UDD RDD Forest & Environment.	Continuous activity
5.	Inventory of sources of water pollution	Prepared	Forest & Environment, SPCB	Continuous activity
6.	Oil spill disaster management (for coastal districts)	N/A	N/A	N/A
7.	Protection of flood plains	N/A	N/A	N/A
8.	Rejuvenation of groundwater	Ground water abstraction for domestic purposed is not practiced in the district. Industrial units who have installed borewells have obtained NOC from Central Ground Water Authority (CGWA)	Department of Forest & Environment, Department of Water Resources & River Development, CGWA	Continuous activity
9	Complaints redressal system	Available at District Administration and SPCB-website	District Adm & SPCB	Continuous activity

ix) Domestic Sewage

a. Identification of gaps and action plan for treatment of domestic sewage

Details of Data Requirement	Present Status
No of Class-II towns and above	Nil
No of Class-I towns and above	Nil
No of Towns STPs installed	1
No of Towns needing STPs	2

District Environment Plan [*South*]

No of ULBs having partial underground sewerage network	Nil
No of towns not having sewerage network	2
Total Quantity of Sewage generated in District from Class II cities and above	Class II cities not present in the district. As per 2011 census and assuming 100 lpcd average water consumption the estimated sewage generation in the district will be 11.75MLD.
Quantity of treated sewage flowing into Rivers (directly or indirectly)	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 village are under process.
Quantity of untreated or partially treated sewage (directly or indirectly)	Not available
Quantity of sewage flowing into lakes	Nil
Total available Treatment Capacity	STPs have not been set up. Acquisition of land under process.

b. Identification of gaps and action plan for treatment of domestic sewage:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Sewage Treatment Plants (STPs)	STPs have not been set up. Survey and investigation for the same under process. Action Plan for setting up of STPs in the state has been prepared	Public Health & Engineering Department	2028
2.	Underground sewerage network	Not available	Public Health & Engineering Department	

Note: Action Plan prepared by PHE department enclosed as Annexure IV

x) Industrial wastewater management

a. Current Status related to Industrial Wastewater Management

Number of Red, Orange, Green and White industries in the District (water based)	17-category – 1 Red – 2(HEP) 1 (Brewery) Orange- 25
No of Industries discharging wastewater	Nil
Total Quantity of industrial wastewater generated	1.079 MLD
Quantity of treated industrial wastewater discharged into nalas / Rivers	Nil
Common Effluent Treatment Facilities	Nil
No of Industries meeting Standards	NA
No of Industries not meeting discharge Standards	Nil

b. Identification of gaps and action plan for industrial wastewater:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Compliance to discharge norms by Industries	Industrial units namely pharmaceutical industries have installed Online Continuous Effluent Monitoring System as per the directions of the SPCB so that real time	Dept. of Forest & Environment, SPCB	Continuous activity

		<p>compliance to pollution parameters can be verified remotely. Industries of various categories are inspected by SPCB on timely basis as specified by the CPCB category wise viz Red, orange, green. Zero liquid discharge is to be maintained in all water based industries in the state. 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.</p>		
2.	Complaint redressal system	Available at District Adm website and SPCB Sikkim Website.	District Adm & SPCB-Sikkim	Continuous activity

xi) Mining Activity Management plan

a. Current Status related to Mining Activity Management

Details of Data Requirement	Existing Mining operations
Type of Mining Activity	Temporary collection of loose boulders, sand & stone
No of licensed Mining operations in the District	32
% Area covered under mining in the District	0.0021%
Area of Sand Mining	
Area of sand Mining	River reserves

b. Identification of gaps and action plan

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion
1.	Monitoring of Mining activity	District Expert Appraisal Committee has be formed	Department of Mines & Geology	Continuous & activity
2.	Inventory of illegal mining if any mining	Action plan to identify illegal sand and other mining activity in the District through surveillance, patrolling and enforcement. District Level task Force may be constituted for control of illegal mining activity	Department of Mines & Geology	
3.	Environment 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 may be involved in this activity .	Department of Mines & Geology	

xii) Noise Pollution Management plan

Current Status related to Noise Pollution Management

Details of Data Requirement	Measurable Outcome
No. of noise measuring devices available with various agencies in district	SPCB Sikkim – 3 nos

b. Identification of gaps and action plan:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Availability of Sound/Noise Level Meters.	Procurement of Sound/noise level meters in process	District Administration, Police Department & SPCB-Sikkim	3 months
2.	Ambient Noise Level monitoring.	Various sensitive zones such as protected areas, hospitals etc have been declared as silent zones Noise monitoring during festival season is conducted by SPCB-Sikkim	UDD, District Administration, Police Department & SPCB-Sikkim	6 months
3.	Signboards in Noise zones	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.	District Administration	
4.	Complaint redressing system	Redressal portal has been set up in District Adm & SPCB website	UDD, District Administration, Police Department & SPCB-Sikkim	

Note : State Action Plan for Control of Noise pollution enclosed as annexure V

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