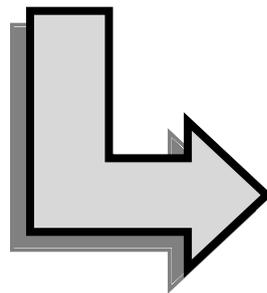
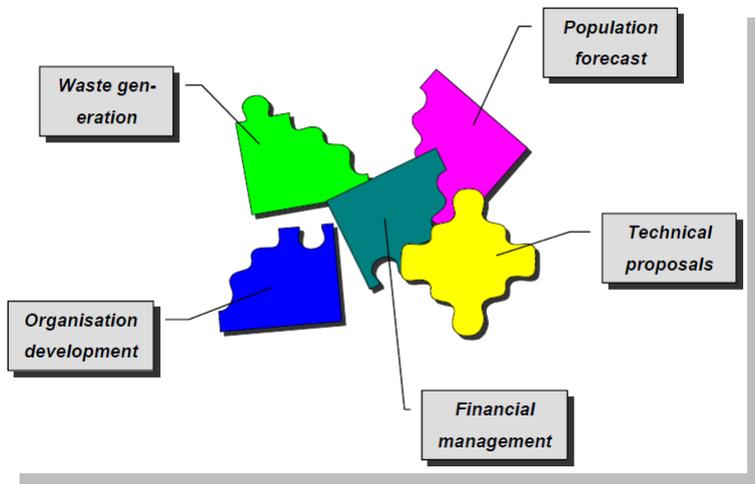


2012

Municipal Corporation
Shimla



MUNICIPAL SOLID WASTE MANAGEMENT PLAN FOR MUNICIPAL CORPORATION SHIMLA



giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH





Contents

1. Objective.....	3
2. City Overview:.....	3
3. Legal Background:.....	4
4. Roles and Responsibilities for Health Department	6
5. Current status of Solid Waste Management in Shimla:.....	6
6. Human Resource involved in Solid Waste Management.....	12
7. Complaint Redressal System for Solid Waste Management.....	13
8. Existing Revenue and Expenditure on Solid Waste Management.....	14
9. Financial Sustainability in Solid Waste Management.....	15
10. Other Waste Streams in Shimla.....	16
11. Service Level Benchmarking for Solid Waste Management of Shimla.....	17
12. Immediate Actions	19
Annexure – I Contacts for Solid Waste Management Staff.....	21
Annexure – II Communication Material for Source Segregation	22
Annexure – III Route and loading plan for (Annadale).....	24
Annexure – V Source.....	25



1. Objective

This document describes the current status, relevant planning figures and the future steps for improvement of Municipal Solid Waste Management in Shimla. It therefore forms a planning document for sustainable Municipal Solid Waste Management in Shimla with special reference to 4R strategy – Reduce, Reuse, Recycle and Refuse. It also aims at informing the public about current and future services, its environment and health benefits as well as the cost it incurs. This document also describes rules and regulations pertaining to MSW and penal provision for non-compliance. This document is therefore a part of MC Shimla's communication strategy for Solid Waste Management.

2. City Overview:

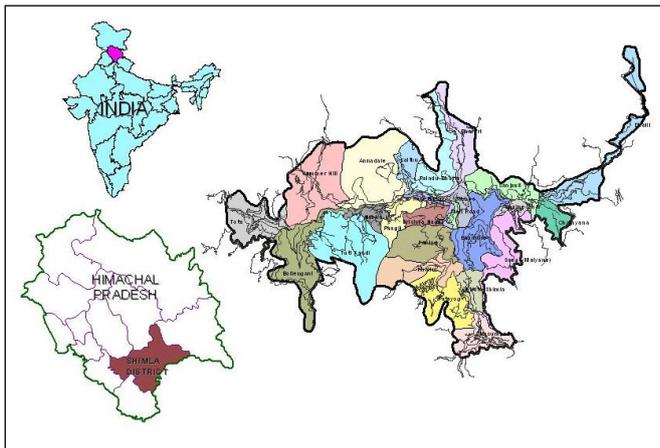


Fig 1. Geographical Location of Shimla City

Discovered in 1819 by the British, Shimla has evolved from a small hill settlement to one of the popular tourist destinations in India. Himachal Pradesh was carved out of erstwhile the Punjab state in 1966 and Shimla became the capital of Himachal Pradesh in 1971. Shimla is situated in the Central

Himalayas at 31°4' to 31°10' north latitude and 77°5' to 77°15' east

longitude. The topography of Shimla is characterised by rugged mountains, steep slopes and deep valleys. Shimla is located at an altitude of 2130 meters above mean sea level. It experiences cold winters during December – February, with temperatures ranging from 0-13°C. Shimla receives snowfall around Christmas or the last week of December. The summers (May – June) are mild with temperatures varying from 20-30°C. The monsoon period extends from June to September and records moderate rainfall. The average rainfall recorded for the last 25 years (1990 – 2005) in Shimla was 1437 mm.

As per 2011 Census, Shimla is the only Class I City in the State of Himachal Pradesh with total population of the Municipal Corporation of Shimla are being 1,69, 758 persons. The total area under the jurisdiction of MC Shimla also has increased after merger of New Shimla, Totu (including some parts of Jutog) and Dhalli areas to 35.00 sq km. At present,



Municipal Corporation of Shimla (MCS) is divided into 25 wards covering urban core and urban fringes. MCS registering almost 20% extra growth rate compared to similar other cities in India, which is resulting in rapid development of real estates, housing, complexes, shopping malls etc.

3. Legal Background:

In 2000, the Ministry of Environment and Forest, GoI, (MoEF) notified the **Municipal Solid Waste (Management and Handling) Rules {MSW (M&H) Rules, 2000}** for all Indian cities. The Rules contained directives for all ULBs to establish a proper system of waste management.

To improve the Municipal Solid Waste Management systems in the cities the following seven directives were given:

1. Prohibit littering on the streets by ensuring storage of waste at source in two bins; one for biodegradable waste and another for recyclable material.
2. Primary collection of (segregated) biodegradable and non-biodegradable waste from the doorstep, (including slums and squatter areas) at pre-informed timings on a day-to-day basis using containerized tri-cycle/hand carts/pick up vans.
3. Street sweeping covering all the residential and commercial areas on all the days of the year irrespective of Sundays and public holidays.
4. Abolition of open waste storage depots and provision of covered containers or closed body waste storage depots.
5. Transportation of waste in covered vehicles on a day to day basis.
6. Treatment of biodegradable waste using composting or waste to energy technologies meeting the standards laid down.
7. Minimize the waste going to scientifically engineered landfills (SLFs) and dispose of only rejects from the treatment plants and inert material at the landfills as per the standards laid down in the rules.

The **steps taken by Municipal Corporation Shimla** to comply with the above mentioned rules include the following:

1. Under the Himachal Pradesh Municipal Act, 1994 MC Shimla has adopted Door to Door Garbage Collection Bye-laws in 2006 which state that each household/commercial establishment / educational institute and other institutes will handover



garbage to the agency authorized by MC Shimla. Non-compliance in this regard will result in the establishment being debarred from civic amenities like disconnection of water, electricity and other basic amenities

2. Municipal Corporation Shimla under The Himachal Pradesh Municipal Corporation Act, 1994 and Himachal Pradesh Non-Bio-degradable Garbage (Control) Act, 1995 has also imposed a fine ranging from Rs. 500 to Rs. 5000 for creating nuisance by littering of garbage.
3. To improve the current SWM system, *Shimla Environment, Heritage Conservation and Beautification* (SEHB) Society was registered in 2009 under the Societies Registration Act 2006. This society is responsible for the door to door collection from households under the supervision of Commissioner and Health Officer. Consistent efforts have been made by MC Shimla to make this initiative a success. Table 1 shows the Governing Body Structure of the society.

Table 1. Governing Body Structure

1	President	Commissioner
2	Vice President	Assistant Commissioner
3	Member Secretary	Corporation Health Officer
4	Treasurer	Accounts Officer, SEHB Society
5	Executive Members	Legal Advisor-Cum-Law Officer, Project Director (Xen) Executive Engineer (R & B), Municipal Engineer, (WS&SD), Veterinary Public Health Officer, Architect Planner, DFO

4. Shimla has successfully banned usage of plastic in the form of bags consequent to the HP Non-Biodegradable Garbage (Control) Act, 1995 and latest Notification on Plastic Waste (Management & Handling) rules, 2011.

Besides this, MC Shimla has been proactive in enforcing and implementing the rules applicable for Hazardous and Biomedical waste.

4. Roles and Responsibilities of Health Department:

The Health Department of MC Shimla is working towards developing a sound municipal waste management system through proper collection, transportation, treatment and disposal of solid waste in the city in a planned and phased manner. For successful implementation of solid waste management in the city, MC Shimla has adopted various models wherein either



MCS/ an agency/ a private operator are responsible for different components of SWM. The overall monitoring and supervision is carried out by MC Shimla with the Himachal Pradesh State Environment Protection & Pollution Control Board in an advisory role. The duties and responsibilities of the various stakeholders include door to door collection of MSW, segregated storage of the waste at secondary storage and collection points, development of chute structures, construction and operation of transfer stations, treatment of MSW and disposal at a designated site and subsequently the sanitary landfill. The Table 2 shows the roles and responsibilities of various stakeholders involved.

Table 2. Roles and Responsibilities for Solid Waste Management in Shimla

S.No	Functional Element of SWM	Responsible Agency/Organization	Monitoring Authority
1	Collection	SEHB Society	MC Shimla
2	Transfer and Transport	Health Department MC Shimla	MC Shimla/ HPSPCB
3	Processing and Treatment	M/s Hanjer Biotech Energies Pvt. Ltd	MC Shimla/ HPSPCB
4	Cost Recovery and recycling	SEHB Society and M/s Hanjer Biotech Energies Pvt. Ltd	MC Shimla/ HPSPCB
5	Disposal	Current disposal at a single designated site for MCS Sanitary Landfill - DPR has been approved, implementation will start soon.	MC Shimla/ HPSPCB

5. Current status of Solid Waste Management in Shimla:

As per MC Shimla's present estimates, the daily waste generation in Shimla City is approximately 86.01 MT. This depicts that waste generation per capita per day is 350 gm/capita/day. The collection of the waste through door to door collection and community bins is approximately 70-75 MT.

The population growth rate of the city during the last decade has been significant. This type of growth rate may be witnessed in the current decade also. Keeping above factors in view the projected quantity of MSW is 125 TPD by the year 2021 and 200 TPD by the year 2041.



Table 3: Population growth and SWM generation in SMC area

Head/ Years	2011	2021	2031	2041
Resident Population (nos)	1,69,758	2,56,883	3,49,361	4,18,296
Floating Population	76,000	1,00,000	1,25,000	1,50,000
Solid Waste Generation (MT)	86.01	124.91	166.03	198.90

Source: Projections- City Sanitation Plan for Shimla; 2011 figures are from the Census 2011

The Figure 2 is a schematic representation of the Municipal Solid Waste Management system within the boundary limits of Municipal Corporation of Shimla. The left column depicts the process flow for waste and the right column shows how the municipal and hazardous waste is being handled within the city.

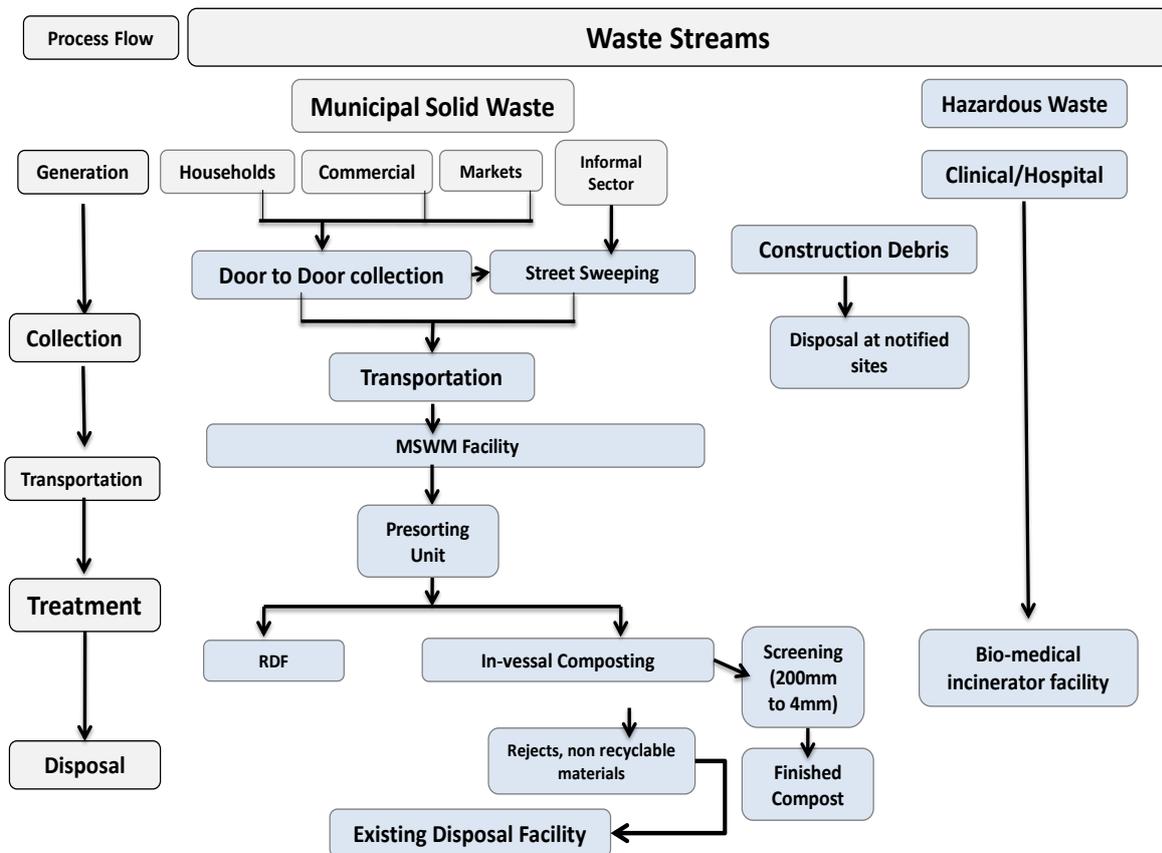


Fig. 2 Flow Chart for Current SWM Practices Followed in Shimla City



Primary Collection System

According to MCS, approx. 85 % of the residential population is covered under door to door waste collection system, followed by 15% population dependent on the community bins for waste disposal. The door to door waste collection has been initiated in all the wards through the SEHB Society; however the percentage population covered under this system varies from ward to ward. The workers from SEHB are collecting the waste from the entire city but due to shortage of manpower in hilly areas, residents in some areas also have their private collection systems. The commercial establishments (hotels, offices etc) have their own system of collection and do not give the waste to SEHB workers. They deposit their waste directly in the containers provided by the MC Shimla. Figure 3 provides an overview of the different disposal modes adopted by the residential as well as non-residential users in Shimla.

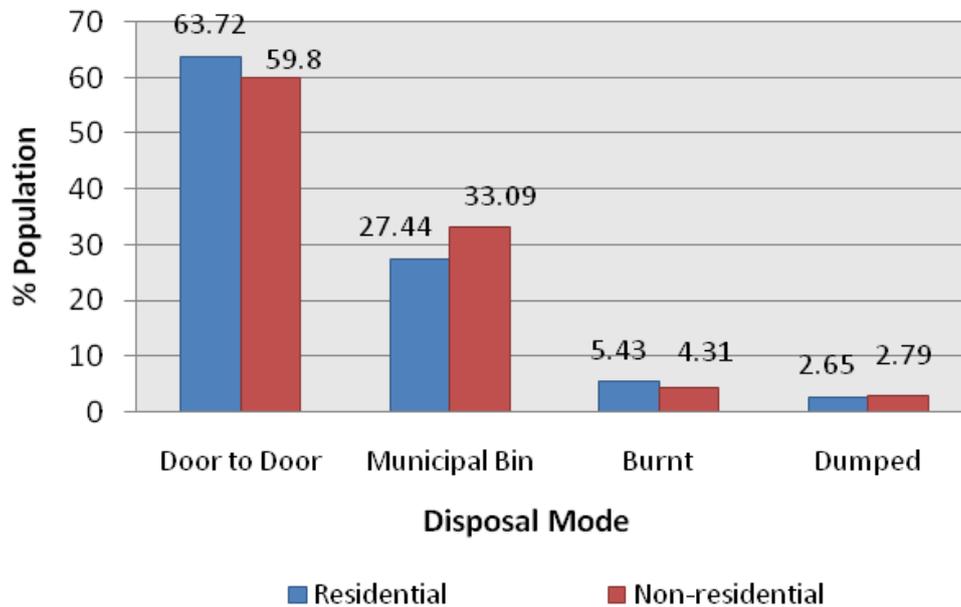


Fig.3 Waste Disposal Mode in Shimla City



Fig. 4 Primary Collection



Fig. 5 Garbage Collection and Transfer Vehicle

SEHB has provided two coloured bins – yellow and green bins - to households/ commercial establishments/ institutions, etc. for collection and segregation of garbage. The yellow bin is for non-biodegradable waste and green bin are for biodegradable waste collections within the establishments. This segregated waste in the respective bins is to be given to the representative of SEHB society as per the collection schedule fixed for each locality. However, the system for segregation at household level is still not well established and needs a lot of support from the community, the SEHB workers as well as the Municipal Staff to prevent it from reaching and the processing site is in mixed form.

Pilot for improving primary collection and segregation of waste in one selected ward- Bharari was conducted in 2010 and with active support of the Councillor, SEHB workers and MCS staff, the Bharari zone has now been made bin-free. The pilot was conducted with technical support from GIZ. MC Shimla gradually wants to minimize/ eliminate the bins from the entire city as it will prevent littering and reduce the menace created by the animals.

Secondary Collection System

The community bin system comprising of 20 concrete dust bins and 93 small dust bins of 1 cu.m are placed for disposal of waste by the residents in Shimla. Also, there are 148 numbers of dumper containers of 4.5 cum capacity and 54 numbers of dumper containers of 3.0 cum capacity. The frequency of clearing of these bins varies from daily, alternate day, twice a week or even once a week depending on the area. These concrete bins and dumper containers are placed at convenient locations for the residents to access and dispose their waste in an appropriate manner.



Transportation of Waste

Transportation of waste from the secondary collection points to the treatment plant and landfill is the responsibility of MC Shimla. The entire city's waste is collected and transported through 32 different vehicles with varying capacities procured under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) project of the Government of India. Table 4 gives a description of the different types of transportation vehicles currently being used by MC Shimla.

Table 4 : Details of Solid Waste Transportation Vehicles

S.No.	Type of Vehicle	Quantity	Capacity (in tonnes)
1.	Pick-Ups (Hydraulic)	25	1-1.5
2.	Pick-Ups (Non Hydraulic)	5	1
3.	Dumper Placer	5	Single
4.	Dumper Placer	3	Twinned
5.	Auto Tipper	3	1
6.	Auto Tipper	3	5
7.	Backe-Loader	1	

For further improving the overall solid waste management system and providing satisfactory services to the citizens, MC Shimla is in process of procuring 2 compactors and 1 mechanical sweeping machine.

Uptill now the waste has been transported to the composting plant located at Darni ka Bagicha which has been operational since 2001. However now on trial basis, waste is being transported to the new treatment and processing facility at Bharial which has been established on through a Public Private Partnership between MC Shimla and the operator M/s Hanjer Biotech Energies Pvt. Ltd.

Treatment

The old treatment plant in Shimla established in 1999 is located at Dharni-ka-Baghicha for bio conversion of solid waste into compost. The plant started functioning at the above mentioned site from December 2001 and was initially run by M/s L & T Company on a turnkey basis. Owing to the increase in population and subsequent increase in amount of waste generation, the plant at Darni ka Bagicha was found to be inadequate and gradually became ill managed, leading to environmental degradation and public nuisance. After Public Interest Litigations were filed in the Hon'ble High Court, the H.P. Government decided to shift the plant to its new location in Bharial.



MC Shimla is in the process of relocating the waste processing unit from Darni ka Bagicha (100 MT capacity) to Bharial. The Public Private Partnership (PPP) Operator M/s Hanjer Biotech Energies Pvt. Ltd, a Mumbai based firm has been awarded the project for setting up of processing and treatment facility. This facility is being run on a trial basis and will be operational by July, 2012. After the commissioning of this treatment facility, MC Shimla will pay tipping fee of Rs. 150/- per MT of solid waste processed with the increase of 8% **every two years.**

The scope of work under the project at Bharial includes design, development, construction, operation and maintenance of municipal solid waste processing facility with aerobic in-vessel compost plant along with material recovery facility and leachate management system. The concession agreement signed between MC Shimla and M/s Hanger is for a period of 20 years.

Disposal

Currently rejects from the processing unit and other non-biodegradable waste are currently being landfilled in a valley near the compost plant at Darni ka Bagicha. To address this MC Shimla has recently prepared a DPR for the implementation of a scientifically engineered landfill facility at Bharial. A Gudgaon based consultancy firm M/s. Voyants Solutions Pvt. Ltd has prepared the DPR and has been approved by the Ministry of Urban Development in 2012.

After the compost plant is shifted to Bharial, initially the rejects will be brought back to Dharni Ka Bagicha for disposal till the new sanitary landfill is operational. The stipulated time for the construction and operation of the sanitary landfill is given as 2 years.

6. Human Resource involved in SWM Management

The Solid Waste Management division is under the administrative control of the Health Officer of the Municipal Corporation Shimla. He is assisted by Project Coordinator, Chief Sanitary Inspector, Sanitary Inspectors, Sanitary Dafedars and Safai Karmacharis. A total of 592 employees including permanent staff, daily wagers and contractual workers are engaged in providing SWM services within the city. Shimla is divided into 25 wards for providing the SWM services. Each sanitary ward is further divided into beats for street sweeping and is supervised by sanitary inspectors. Sanitary Inspectors are also responsible for monitoring of door to door garbage collection scheme which is undertaken by SEHB Society workers. Table 5 gives an overview of the staff strength of MC Shimla.



Table 5. Present Staff Strength of Health Department of MC Shimla

Sr. No.	Position	Qualification	Available
1	Corporation Health Officer	MBBS + Post Graduate in Public Health	1
2	Veterinary Public Health Officer	Bachelor in Veterinary Sciences	1
3	Project coordinator	Doctorate	1
4	Chief Sanitary Inspector	Matriculation + Sanitary Inspector Course	1
5	Sanitary Inspector	Matriculation + Sanitary Inspector Course	6
6	Dafedars	No qualification required	26
7	Safai Karmachari	No qualification required	470

The Organisational Chart of the Solid Waste Management Department in MC Shimla is shown in Fig. 6.

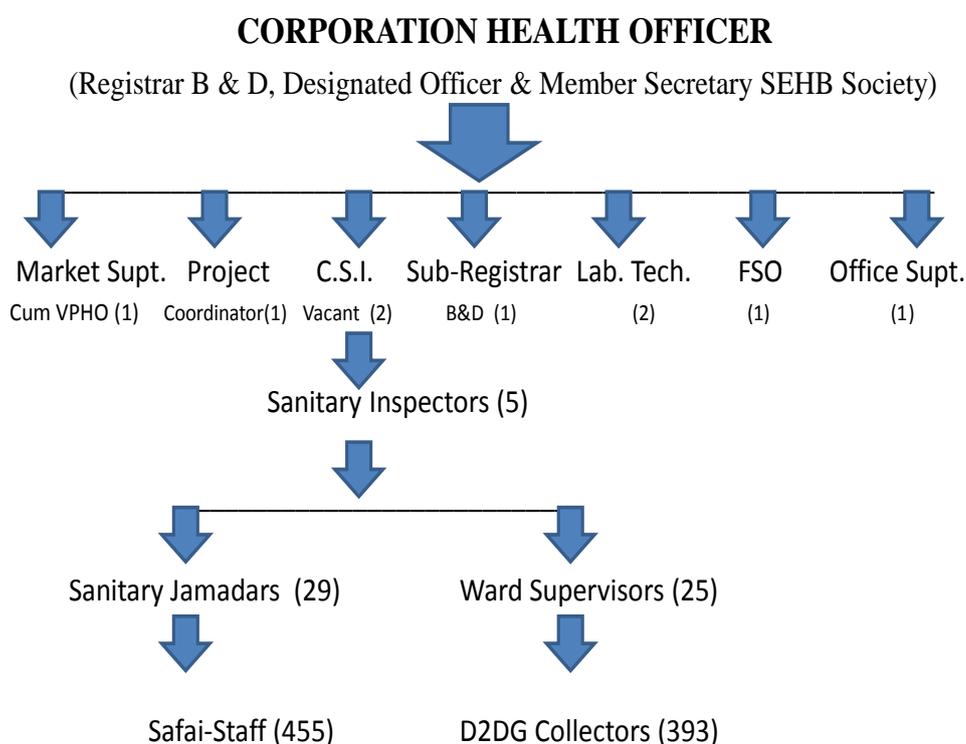


Fig. 6 Organogram for Health Department, MC Shimla



7. Complaint Redressal System for SWM in Shimla

The current complaint redressal system within MC Shimla is a centralized three way approach which highlights some of the good initiatives taken by the authorities. This system is supported in English, Hindi and Pahari (Himachali) languages. A dedicated Compliant Cell in the office of the Corporation Health Officer has been created, wherein citizens can get their complaints lodged. Contact details of all officials related to SWM are available on the official site of MC Shimla. A consumer can lodge his/her complaint anytime during the office hours telephonically or by visiting the ward level office and by submitting a written complaint. Complaints can also be lodged through the e-smadhan portal or through e-mail on **mcs_shimla@yahoo.co.in**. After the complaint is registered, officials first cross check whether there is actually a problem in the area and then complaints are routed to the concerned sanitary inspector and further on as depicted in Figure 7.

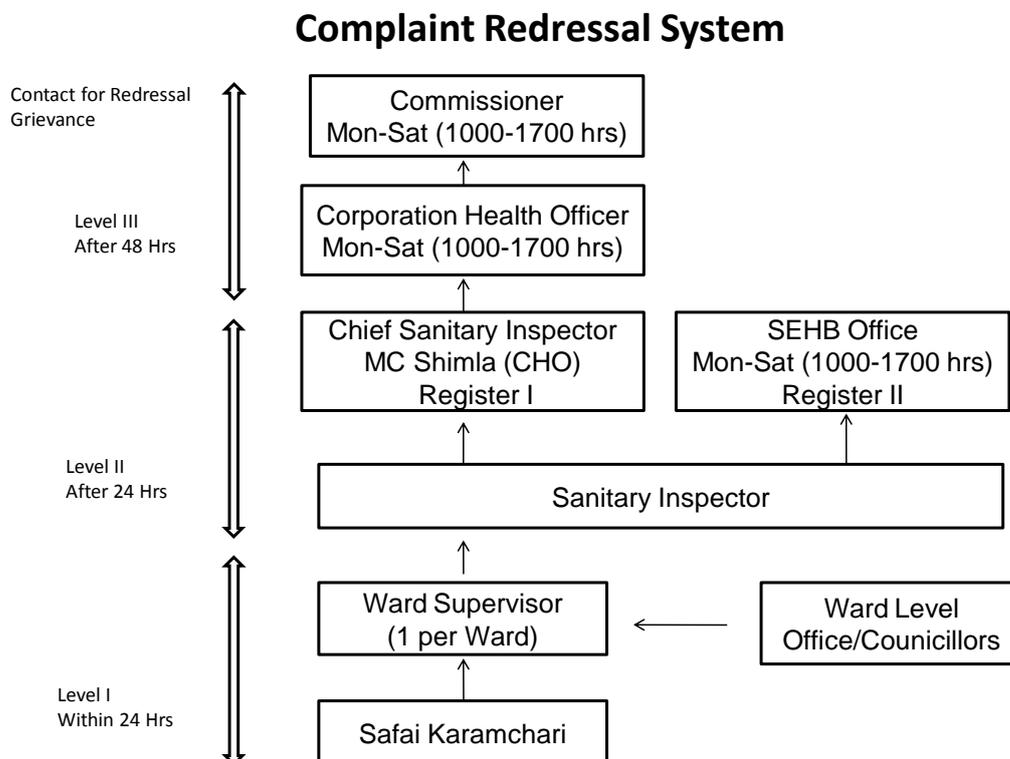


Fig 7. Complaint Redressal System followed by MC Shimla

Each concerned official has to report the status of complaints within 24 hours otherwise complaint is reviewed by the higher level officials based on the hierarchy. The Chief Sanitary Inspector and Office Superintendent are accountable for the complaint redressal mechanism



at MC Shimla and SEHB office respectively. Majority of the complaints are redressed through this formal mechanism.

A helpline number has also been widely notified under the system and complaints can be made on the landline number **0177-2802771, Ext 421**.

8. Existing Revenue and Expenditure on MSWM:

Revenue

MC Shimla receives funds under 13th Finance Commission and State Grants for sustaining and improving Solid Waste Management services. Under the Jawaharlal Lal Nehru National Urban Renewal Mission (JNNURM), an integrated Solid Waste Management Project has been approved for Rs. 1,604 Lacs by GOI, out of which an amount of Rs. 481.20 Lacs has already received (MoUD Share of Rs. 320.8 Lacs and Rs. 160.4 Lacs State share). An amount of Rs. 351.45 Lacs has been spent till date for the purchase of 30 pickup vans, 80,000 garbage bins and on consultancy fees for preparation of Detailed Project Reports (DPR's).

Expenditure

There is no separate budget head for SWM within MC Shimla does not have a separate budget head for SWM but as per the MC Shimla estimates the total annual operations and maintenance expenditure on solid waste management in the year 2009-10 was estimated to be Rs. 9.184 crores. The details are given in Table 6.

Table 6. Cost heads for SWM in Shimla

Cost Head	Annual cost (in Crores) 2009-10	Per unit cost (in Rs. Per tonne) 2009-10
Regular staff and administration	7.65	3860
Outsourced/Contract staff costs	0.42	210
Electricity charges/fuel costs	0.32	160
Chemical costs	0.0003	1.5
Repair and maintenance costs	0.09	47
Contracted services cost	0.689	350
Other Costs-advertisements	0.0054	2.7
Total cost of solid waste management	9.184	4631.20

The cost heads listed above include the monthly lump sum payment of Rs. 4.5 lakhs for processing waste at Darni ka Bagicha but do not include the costs incurred by SEHB Society as it came into operation only in April 2010.



9. Financial Sustainability for Solid Waste Management:

In order to sustain a MSW management according to the rules and also as a requirement under the JNNURM project, it is necessary to recover costs for collection, transportation, treatment and disposal. The current solid waste management within MC Shimla can be broadly categorized into four sections: costs incurred by MCS, costs incurred by SEHB, costs incurred by treatment site operator/ tipping fee to the Operator (M/s Hanjer Biotech Energies Pvt. Ltd) and cost incurred by the landfill site operator (after the operator is appointed). Currently the SWM cost is borne by MCS through a combination of user charges based on different categories of users and waste generators and also by earmarking an amount from the property tax revenue of the city.

The concept of user charges was introduced in MC Shimla area in 2006. In lieu of door to door collection of waste from households and other establishments (commercial as well as non-commercial) collected at that time by different NGOs. After the conception of SEHB in 2009, these user charges are now collected on a monthly basis by the SEHB representatives against a proper receipt. The user charges are levied after they are endorsed by the Electoral Council and notified from time to time. The current charges are divided across 28 categories. Table 6 below shows the current user charges for door to door collection as notified by MCS in February, 2012.

SEHB Society charges Rs. 50 towards the membership charge of the door to door collection scheme offered by it. Till March 2012, SEHB Society has enrolled 36,211 members in various categories which generate an estimated income of Rs. 18.0 Lac per month from user charges. SEHB also provides yellow and green bins to households/commercial establishments and other institutions etc. on payment of INR 50 as a security deposit. The Society is presently running the door to door scheme on sustainable basis.

Table 6: User Charges notified by MC Shimla on February 1, 2012

S.No	Category	Rate/Month
1	Households	40
2	Dhaba	350
3	Restaurants	1500
4	Pan Shop/ Tea Shop	75
5	Hotels/Guest Houses/ Dharamshala up to 10 Rooms	1000
	Hotels/Guest Houses/ Dharamshala 11 to 20 Rooms	1500



	Hotels/Guest Houses/ Dharamshala 21 to 30 Rooms	2000
	Hotels/Guest Houses/ Dharamshala above 30 Rooms	2500
6	Offices (2 rooms)	100
	Offices (3-5 rooms)	250
	Offices (6-10 rooms)	1000
	Offices (11-20 rooms)	2000
7	Factories/ Workshops	1000
8	Shops	75
9	Cinema Hall	1200
10	Bakeries/ Food Joints & Bakery Out Lets	500
11	Hostels up to 50 Rooms	500
	Hostels with more than 50 Rooms	500
12	Banks	250
13	Fast Food	500
14	Sweet shop	350
15	Vegetable/fruit shop	200
16	Schools (Government)	200
	Schools (Private)	1000
	Colleges (Government)	1000
	Colleges (Private)	1500
17	All other Establishments	Rs. 500/-

10. Other Waste Streams in Shimla:

Bio-medical Waste:

‘Bio-medical waste (BMW)’ means any waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or in research activities pertaining thereto or in the production or testing of biological. It means any solid or liquid waste which may present a threat of infection to humans, including non-liquid tissue, body parts, blood, blood products, and body fluids from humans and other primates; laboratory and veterinary wastes which contain human disease-causing agents; and discarded sharps. BMW is currently being collected and transported by M/s Greencarpet Pvt. Limited in Shimla and incineration activities are managed by MC Shimla and monitoring is done by the Himachal Pradesh State Environment Protection and Pollution Control Board.

Hazardous Waste and E-waste

Hazardous waste is waste that poses substantial or potential threat to public health or the environment and which is ignitable (i.e., flammable), reactive, corrosive and toxic. In the industrial sector, the major generators of hazardous waste are metals, chemicals, paper, pesticide, dye, refining, and rubber goods industries. Household waste that can be categorized



as hazardous waste include old batteries, shoe polish, paint tins, old medicines, and medicine bottles. E-waste is all electronic waste that is generated from a household like computers, mobiles, etc. The process of handling and management of these waste streams is currently not planned by MC Shimla and will be in due time.

11. Service Level Benchmarking for Solid Waste Management of Shimla

The Ministry of Urban Development (MoUD), GoI has introduced Service Level Benchmarking as one of the appropriate systems for information management, performance monitoring and benchmarking. This system is aimed at improving not only the service provision but also the delivery of services to the consumers. MSWM is one of the 4 basic urban services which MoUD has identified as a performance parameter. These are indicators to measure the stepwise performance in MSWM at ULB level.

Under the 13th Finance Commission, Service Level Benchmarking is a key criteria for performance grant of ULBs. Each ULB has to declare its current level of services as well as the target for improvements for the next year on the basis of defined criteria. Table 7 below shows the current status of MC Shimla as against the required benchmarks set under the criteria and Figure 8 shows the graphical representation of performance indicator.

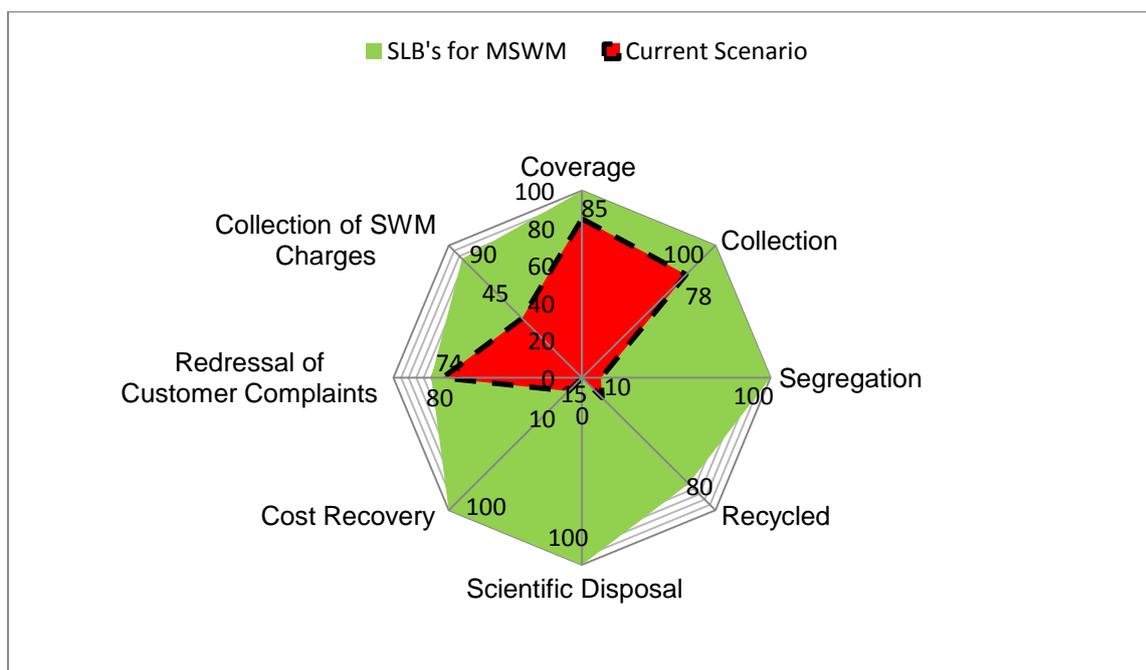


Fig 8: Graphical representation of Service Level Benchmark

Table 7: Service Level Benchmark Indicators for Solid Waste Management

Performance Indicator	Benchmarks (in percent)	Base Levels April 2011	Data Reliability	Target (percent) March 2012	Achievement (percent) March 2012	Data Reliability	Target (percent) March 2013
Household level coverage of solid waste management services	100	84.8	B	90	84.16	A	88
Efficiency of collection of municipal solid waste	100	77.8	C	80	74.72	B	78
Extent of segregation of municipal solid waste	100	10	C	20	14	C	20
Extent of municipal solid waste recovered	80	15	C	30	16	C	30
Extent of scientific disposal of municipal solid waste	100	0	D	50	0	D	0
Extent of cost recovery in solid waste management services	100	9.9	A	15	11.52	A	15
Efficiency in collection of solid waste management charges	90	44.4	B	60	93.41	B	95
Efficiency in redressal of customer complaints	80	74.1	B	80	80.8	B	85

11. Immediate Actions

Municipal Corporation Shimla:

- Initiate the Tendering Process for the sanitary landfill and appointment of an operator for the sanitary landfill.
- Fully operationalized the new treatment plant at Bharari run by the PPP operator M/s Hanjer Biotech Energies Pvt. Ltd. And monitored by MC Shimla
- Preparing an optimal routing and loading plan for transportation by MCS after commissioning and full operation commencement of the new treatment plant at Bharari.
- In order to comply with the MSW (M&H) Rules, MC Shimla also plans to introduce segregation at source stepwise in the city.

Citizens:

- Citizens should store waste at their residences, if they are not able to give waste to SEHB workers on a particular day.
- Citizens will need to segregate waste in two forms mainly wet or organic and dry or in-organic within their households and store in green and yellow bins respectively.
- The segregated waste collected thus has to be handed over to the door-to-door waste collector from SEHB.

For further details and contact address:

Dr. M. P. Sood, Commissioner Municipal Corporation Shimla Town Hall, Mall Road, Shimla Himachal Pradesh Phone: 0177 2812899 E-mail: mcs_shimla@yahoo.co.in	Dr. Sonam G. Negi, Corporation Health Officer Municipal Corporation Shimla Town Hall, Mall Road, Shimla Himachal Pradesh Phone: 0177 2802771 Extn-444 E-mail: drsonamnegi@yahoo.co.in
---	---



Annexure – I Telephone Numbers of SWM Staff

Telephone No's of Sanitary Inspectors & Ward Supervisors			
SANITARY INSPECTORS			
Name of Sanitary Inspector	Phone No.	Allotted Wards	
Sh. Ram Singh	94180-29908	10,11,24 & 25	
Sh. Rajnish Brar	94180-38021	1,16,17 & 19	
Sh. Laiq Ram	94180-16782	18,20,21,22 & 23	
Sh. Sohan Lal	94180-90195	6,7,8, & 9	
Sh. Kishore Chand	94180-78242	2,3,4,& 5	
Sh.Bharat Bhushan	94180-14593	12,13,14 & 15	
LIST OF WARD SUPERVISORS			
Ward No.	Ward Name	Name of Supervisors	Contact No.
1	Bharari	Sh. Ravinder	94186-69758
2	Ruldhu Bhatta	Sh. Guru Dev	88949-36837
3	Kaithu	Sh. Naresh Kumar	94590-92003
4	Annadale	Sh. Bharat Kumar	98164-05988
5	Summer Hill	Sh. Dinesh	88948-95059
6	Totu	Sh. Hitender	98173-88592
7	Boileauganj	Sh. Verinder Kumar	98164-54789
8	Tuti Kandi	Sh. Narinder	98161-66280
9	Nabha	Sh. Narinder Kumar	98177-99610
10	Phagli	Sh. Dharminder Kumar	98822-30800
11	Krishna Nagar	Sh. Vijay Kumar	88945-85525
12	Ram Bazar	Sh. Satvir	98171-51277
13	Lower Bazar	Sh. Prem Kumar	94186-42842
14	Jakhu	Sh. Krishan Bhagat	98941-45567
15	Benmore	Sh. Deepak Kumar	94186-26100
16	Engine Ghar	Sh. Dil Bag Singh	94180-09742
17	Sanjauli Chowk	Sh. Satveer Singh	80910-39100
18	Dhalli	Sh. Manoj Kumar	94592-15406
19	Chamyana	Sh. Pratap	98167-24390
20	Malyana	Sh. Raj Kumar	86795-64012
21	Kasumpti	Sh. Yogesh Mandla	98164-68339
22	Chhotta Shimla	Sh. Rajesh Kumar	88942-46678
23	Patyog	Sh. Sunil Kumar	97363-44961
24	Khailini	Sh. Bhoop Singh	98573-57133
25	Kanlog	Sh. Kishori Lal	93188-44555



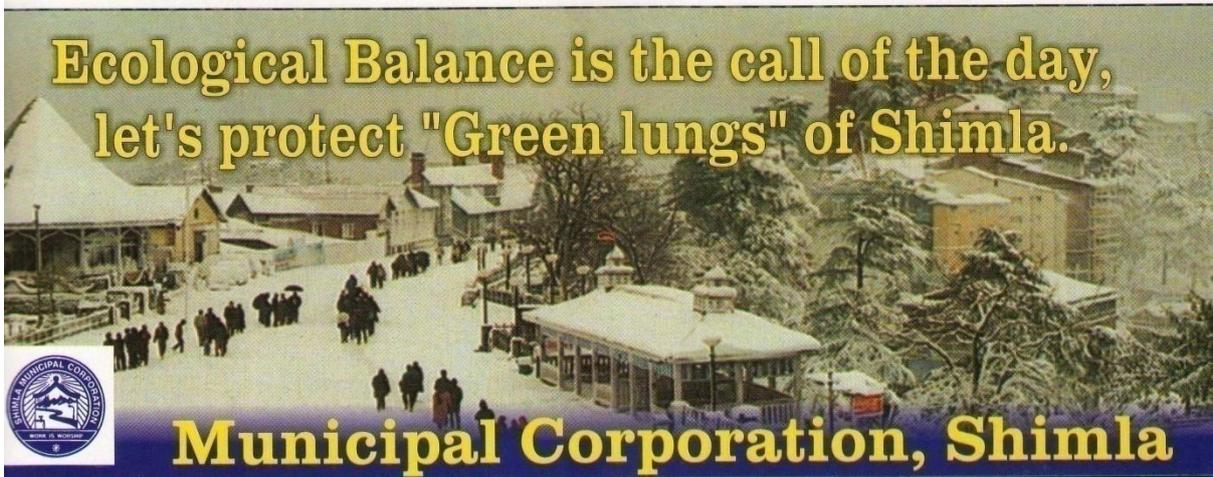
Annexure – II Communication Material for Source Segregation

<p>WHAT Do You Pay And WHO Will Collect It ??</p> <ul style="list-style-type: none"> An authorized person will be appointed by MCS for membership of households and collection of refundable membership, refundable deposits and user charge payments at your door step. The authorized person will have a valid identity card, which will be shown to you on request. He will take all details for membership of each household in a Membership form. He will collect a one time Refundable fee of Rs.100 as a Membership and Security Deposits He will collect user charges every month as per the category please collect a receipt for all payments The rates for door to door garbage collection scheme for all households will be Rs.35 	<p>WHAT Should You Do With The Waste??</p> <ul style="list-style-type: none"> > Authorized MCS Safai staff will collect the waste from your door step between 7am and 10am on all days except Thursday > Keep the bins inside your homes > If you miss giving the waste, please hand it over next day > Do not throw the waste out or down the hillside > DO NOT LEAVE THE BINS OUTSIDE as it will attract Monkeys, Dogs, and birds and create a nuisance. <p>CUSTOMER COMPLAINT Contact your local ward committee office Your complaints will be addressed within 72 hours</p> <p>HELP LINE & QURIES E-mail:mcs_shimla@yahoo.com</p> <p>MORE INFORMATION Call your Ward Committee office Health Dept No 2802771-76 Ext 514</p>	<p>Care for the ENVIRONMENT.. Do YOUR bit..</p>  
--	---	--

<p>Dear Citizens,</p> <p>Let us together show we care for our environment and help make Shimla litter free, clean and beautiful.</p> <p>MCS is about to launch a NEW programe "CLEAN SHIMLA GREEN SHIMLA." MCS is taking a big step to make Shimla Litter free. MCS will now introduce Door to Door Collection of Waste from your doorstep.</p> <p>We will distribute GREEN and YELLOW bins to every household, to help you segregate your waste at source.</p> <p>You will be a member of this new initiative by paying Rs. 100 as Refundable Membership Fee and security deposit.</p> <p>In this leaflet you are given the details of our steps taken towards managing the waste.</p> <p>We seek you cooperation to make this initiative a grand success.</p> <p>Become a member and be a partner in making Shimla "CLEAN SHIMLA GREEN SHIMLA."</p> <p>Commissioner MUNICIPAL CORPORATION SIMLA</p> <p><i>Keep Shimla Clean Clean Shimla Green Shimla</i></p>	<p>Municipal Solid Waste Management</p> <p>'Management of SWM' in Shimla</p> <p>What's New??</p> <ul style="list-style-type: none"> > MCS will register each household as a member of the respective ward > MCS will distribute a Green and Yellow Bin for wet and dry waste to each household > MCS will have door to door collection of waste by the Safai staff > MCS Safai staff will collect waste from Yellow & Green Bins separately > MCS will take the waste from the Green bins to composting facility > MCS will take the waste from the Yellow bins for recycling after secondary segregation > MCS will handle this segregated waste by improved technical and scientific way of waste handling 	<p>Green Bin</p>  <p>put ONLY Wet/Biodegradable waste that is vegetable peels, food waste, etc.</p> <p>How & Why</p> <p>Do We Have To Segeragate The Waste??</p> <p>Wet and dry waste mixed loses value and makes it very difficult to handle the waste to segregate further.</p> <p>Yellow Bin</p>  <p>put ONLY Dry, Recyclable, Non Bio-Degradable, that is plastic, paper, metal...etc.</p>
---	--	--

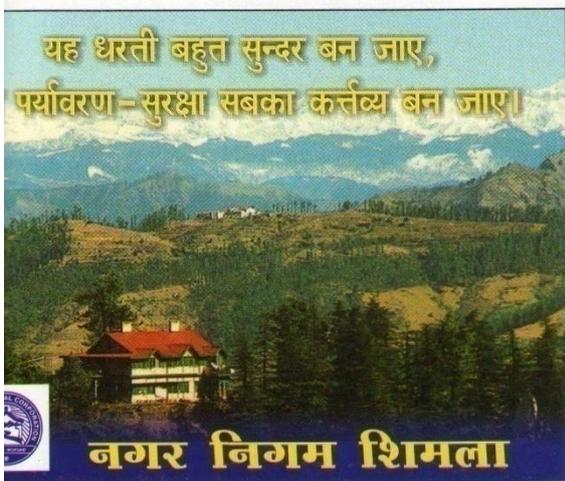


**Ecological Balance is the call of the day,
let's protect "Green lungs" of Shimla.**



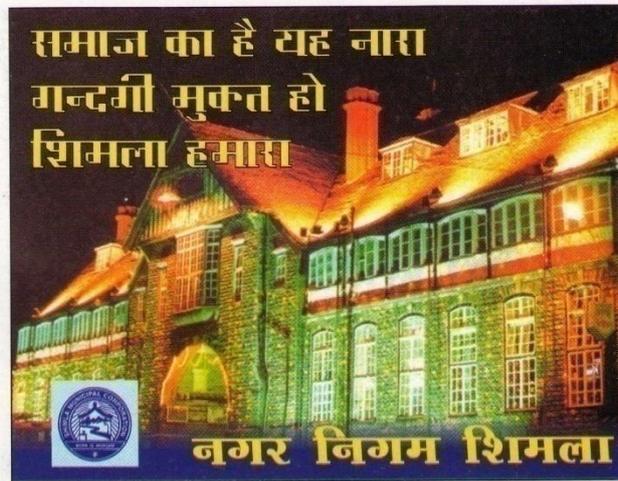
Municipal Corporation, Shimla

**यह धरती बहुत सुन्दर बन जाए,
पर्यावरण - सुरक्षा सबका कर्तव्य बन जाए।**



नगर निगम शिमला

**समाज का है यह नारा
मन्दगी मुक्त हो
शिमला हमारा**



नगर निगम शिमला



Annexure IV Sources:

1. Municipal Solid Waste Management and Handling Rules (MSW (M&H) Rules), 2000
2. CPHEEO Manual, Ministry of Urban Development, Government of India
3. DPR for Solid Waste Management Shimla 2007
4. Himachal Pradesh Municipal Corporation Act 1994
5. MoUD Handbook on Service Level Benchmarking, 2011
6. City Sanitation Plan for Shimla
7. City Development Plan for Shimla



Solid Waste Management Plan for Municipal Corporation Shimla
