

# Solid Waste Management Advocacy & Communication Strategy (SWACS)



# Directorate of Urban Development, Shimla Himachal Pradesh



Underground waste Bins: Our best Innovation for Collection & segregation of Solid waste



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Himachal Pradesh state has taken the lead in the country for putting in place the state of the art and highly advanced Municipal solid waste management system with the help of the Embassy of the Netherlands. The feasibility study completed by us with the invaluable assistance of Dutch consortia and technologies and management practices to be adopted has been finalised. Our MSWM strategy is based upon the paradigms of; "Segregation at source", "waste to value" and "community ownership". Therefore the success and failure of this MSWM strategy in the state shall solely depend upon level of participation of entire community in whole heartedly owning, adopting and operation of technologies and management practices being used to manage municipal solid waste in urban areas of the state. If we talk about community ownership, it means that we need to reach each and every citizen residing in urban areas to not only make him/her fully aware about each and every aspect of MSWM system and technology being put in place but it needs to be ensured that they actually own and adopt it willingly.

It however is highly technical and most tiresome job but it is indispensible and MSWM strategy based upon state of the art technologies, being adopted by the State is bound to fail without it. This IEC strategy therefore would go a long way to make our efforts of making urban Himachal waste free, successful and sustainable. I complement MSWM cell of Urban Development department in general and Mr. Suresh Kumar, Environment & SWM Specialist in particular to put in dedicated efforts to develop this community organisation strategy. I sincerely hope that all field functionaries now put in their best to actually adopt and implement this strategy to make MSWM in Himachal a people's movement.

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## **Abbreviations**

**SWACS-** Solid Waste Management Advocacy and Communication Strategy

**ULB:** Urban Local Body

IEC: Information Education Communication SBM (U): Swachh Bharat Mission (Urban) BCC: Behavior Change Communication SWM: Solid Waste Management

**ISWM:** Integrated Solid Waste Management

IPC: Interpersonal Communication

**SHG:** Self Help Group

**RWA:** Resident Welfare associations

MSWM: Municipal Solid Waste Management

**HHs:** House Holds

NYKS: Nehru Yuva Kendra Sangathan

**NCC:** National Cadet Corps **NSS:** National Service Schemes

**MM:** Mahila Mandal

**HPAAP:** Himachal Pradesh Annual Action Plan

AIR: All India Radio

**FM:** Frequency Modulation **DD:** Delhi Doordarshan

**CPCB:** Central Pollution Control Board **SPCB:** State Pollution Control Pollution

**UNDP:** United Nations Development Programme

**HRD:** Human Resource Development **OD:** Organisational Development

ILFD: Institutional and Legal Framework Development

ID: Infrastructure Development FCB: Financial Capacity Building PPP: Public Private Partnership

**UDD:** Urban Development Department **DUD:** Directorate of Urban Development **NGO:** Non Governmental Organization **NULM:** National Urban Livelihood Mission

**M & E:** Monitoring and Evaluation **MOUD:** Ministry of Urban Development

**NP:** Nagar Panchayat

**MC:** Municipal Corporation/Council

**CU:** Composting Unit **VU:** Vermicomposting Unit **CCU:** Community Compost Unit

CVU: Community Vermicomposting Unit

**1.0 Introduction:** This strategy framework is based on three critical behaviors for the Municipal Solid waste Management in the urban local bodies (ULB) at Household, community & ULB level. These are followings:

- Collection, segregation & treatment at household level
- Collection, Segregation & Treatment at community level.
- Collection, segregation, transportation, treatment and final disposal at ULBs level.

Whole strategy framework should have following specific communication objective:

- The audience receiving information(the WHO)
- > The content of information(the WHAT)
- The methods to be used to convey(the HOW); and
- The approaches to promote change (the ACTION).

Here IEC (Information, Education and Communication) would be used to make people/community/ULBs aware about the collection, Segregation and treatment of municipal Solid waste and Advocacy undertaken for the capacity Building activities and community participation for sustainable Solid waste Management. IEC and Capacity development are mainly two components under the SBM(U) which mandates the change and pushing towards the sustainability for the Solid Waste management practices and thus the waste free Himachal Pradesh.

## 2.0 Objective of IEC & public awareness under Advocacy & Communication Strategy

Solid Waste Management is an activity in which volunteerism and public participation are the keys to success. It is not only the technology but public attitude and behavior that are going to make the difference. An IEC Plan focusing on solid waste management will therefore basically aim at the following:

**Creating behavioral change (BCC)** for scientific waste disposal. This will include (i) adoption of the **4R concept-reduce, reuse, recycle and recover** the waste (ii) storage and segregation at source (iii) imbibing the civic responsibility of keeping the premises clean (iv) willingness to accept the civic responsibilities of citizens,

and (v) willingness to part with the adhoc approach of unscientific solid waste disposal.

- Awareness creation on the **ill effects of unscientific SWM**. E.g., (i) health hazards (ii) aesthetic damage (iii) environmental issues etc.
- Awareness creation on the various **technical options** of solid waste management and exploring the possibility of converting **wastes as a resources**.
- Adoption of **Proximity theory of SWM**. (Scientific disposal of waste at the nearest point of source. E.g., biogas plant at a market; composting at households etc.)
- Community adherence to rules, orders and directives and pay for services.
- Adoption of integrated approach. (E.g. (i) The institutional mechanism created for collection and transportation of waste could, in return, be used for sale of manure manufactured at the compost plant (ii) using recycled materials for manure packaging (iii) the manure packets could contain IEC messages etc.

#### 3.0 IEC (Information, Education and Communication)

Information, Education and Communication (IEC) is a process of working with individuals, communities, societies and policy & decision makers to develop communication strategies to promote positive behaviors which are appropriate to their Culture& Social/Community behaviors. IEC combine all suitable strategies, approaches and methods that enable individuals, families, groups, organizations and communities to play active role in achieving, protecting and sustaining the desired behavioral change.

#### 3.1 Importance of IEC

IEC plays a pivotal role in creating awareness, mobilizing people, and making development process participatory through advocacy and by sharing knowledge, skills and techniques with the people. It is also critical for bringing about transparency in implementation of programmes at the field level and for promoting the concept of accountability and social audit. There are various techniques of communication, which include mass communication as well as interpersonal communication. There are no any fixed formulae and the techniques

mobilize and ensuring participatory development .It varies from place to place, according to their specific problems, cultures and social setup.

**3.2 Strategy for the IEC, Public awareness & Capacity Development.** Principles of strategy for IEC and Public awareness are based on the **downward dissemination theory** and **Convergence theory** for the message dissemination, Behavior change and capacity development on integrated Solid Waste Management (ISWM).

#### Followings strategies shall be adopted at the Implementations level.

- Sensitization cum Workshop of town leaders for BCC on SWM. This workshop shall be aimed at sensitization of community leaders and also take their feedback. These town leaders shall be requested to disseminate the information amongst their community and they will be motivated to spearhead the movement in the town. This workshop shall also be utilized to identify volunteers dedicated to the cause of MSWM.
- ➤ Sensitization cum workshop of Ward leaders for SWM; this workshop shall be organized 7 10 days after the town leaders workshop and shall be aimed at establishing partnerships with the ward level community leaders. Ward level volunteers dedicated to the cause of waste management shall be identified in the workshop.
- Sensitization cum workshop at community level: it shall be done by way of ward level camps and other community based activities. SHGs formed in the wards could be assigned pivotal role in it
- ➤ Training and sensitization of support organization and Volunteers on BCC and Base line survey.(Attached Annexure-I,Formates- For Sanitation, hygiene & SWM status)
- Interpersonal Communication (IPC), contacting every households through town leaders and supporting organizations Volunteers. These volunteers shall tale the message to each and every household and take their feed back as well.

- ➤ Convergence theory for the message dissemination and BCC by involving religious leaders, SHGs, Youth Clubs, Mahila Mandals, RWA and with prerecorded religious & Cultural programme
- Involvement of Institutions academicians for the Environment and atmosphere building by school/College Student as School Rallies, Slogan writing, essay Competition etc.
- Formations and Involvement of Swachchata Committee comprising of Volunteers or Natural Leaders in each ward who will act as SBM ambassadors and take oath for Waste free Himachal and each committee shall have minimum 10 members..

## 3.3 IEC Implementation Strategy template for the MSWM in Himachal Pradesh

#### 3.3-A Information:

Stakeholders	Content of Information	Methods to convey the information(Methodolo gy)	Any remarks
1 HHs	Collection & segregation and possible treatment	IPC along with Poster, Leaflet, Brochure	NYK CRP along with Format for Base line
2 Community	Use of underground Bins for Collection & segregation and treatment at community level	Hoarding for the use of Underground Bins and all aspects of SWM.	
3 Mass level	All aspects of SWM practices.	Print Media, Electronics Media, Poster, Hoardings, Use of Public Transport.	
4ULBs	All aspects of SWM practices.	Technical Manual, Brochure	
5 Institutions	All aspects of SWM practices	Rallies, Quize Competition, Debate, Incorporates the concept	

of SWM in school	
Curriculum, SWM Oath	
at schools.	

## 3.3-B Education: Its objective is to educate people from their individual level to Group level and Mass Level

**3.3-B-1 Education at Individual Level:** Make the people aware about all aspects of Solid waste Management and health hazards of solid waste due to improper handling and Management through Interpersonal Communication (IPC) at house hold level.

IPC at HHs level with designed format to assess the Sanitation facilities, solid waste Management and handling practices, identification of bulk generator of solid waste, its improper handling, poor sanitation & Hygiene practices and mobilize them for proper waste management and handling practices and to adopt the good sanitation and hygiene practices. IPC shall also Introduce 3 R Concepts and sensitize them.

- **3.3-B-.2 Public education at Group/Community level:** The elements of Group education may be taken as followings:
  - Workshop
  - > Exhibition
  - Lecture Series
  - Panel discussion
  - Group meeting/Community meeting
- **3.3-B-3 Mass education:** Principle of Mass education would be based on" **waste** free Himachal and Green & Clean ward."The elements of mass education may be taken as followings:
  - Use of print media, electronic media, Social Media etc.
  - > Street plays, puppet shows
  - > Poster, pamphlet, hoardings, use of public transport system
  - > Use of School children as change agent

- > Incorporate the SWM into primary school curriculum.
- ➤ Involvement of NYK, NCC, NSS, Scouts guide etc.
- ➤ Involvement of Religious leader
- ➤ Improvement of Medical practicener to focus on health impacts of solid waste.
- ➤ Involvement of Mahila Mandal(MM)/SHGs
- ➤ Involvement of Resident Welfare Association (RWA).

## 3.3-B-4 Template for Education

Stakeholders	Content of	Methods to convey the	Any remarks
	Information	information(Methodology)	
1 HHs	Collection &	IPC with Poster, Leaflet,	NYK with
	segregation and	Brochure	Format for
	possible		Base line as
	treatment		НРААР.
2	Use of	Hoarding for the use of	No of
Community	underground	Underground Bins and	workshop-1
	Bins for	workshop of Town leader and	as per HP
	Collection &	IPC at Community level with	AAP.
	segregation and	town leaders and volunteers of	
	treatment at	NYK as community	
	community level	participation. Lecture	
		Series Exhibitions, Panel	
		Discussion and Group meeting.	
3 Mass level	All aspects of	Print Media, Electronics	One
	SWM practices.	Media,Poster,Hoardings,	workshop at
		Use of Public Transport and	state level
		Workshop at state level of	
		govt officers and public	
		representation.	

- **3.3-C.Communication:** To inform and educate the people and system, we need the Communication Materials through which we can convey our message in clear & easy way. There are followings means of Communication for the sustainable approach of SWM practices and handlings.
  - Poster, Pamphlet, Banner, Hoarding, leaflet and Brochure.
  - > Technical manual on SWM
  - Slogan, standee display on steps of process of SWM
  - Material on SWM for the School Curriculum.
  - ➤ Display Board at the site of Biogas plant, sanitary landfill as MSW rule Norms and CPCP norms(Specially for Sundarnagar and Dhramshala, Paonta Sahib on pilot basis)
  - > Display board at the site wherever underground waste bins are installed (How to use).
  - Materials convergence with Religious content on SWM.
  - > Flag and Sun Visor for school children Rallies
  - ➤ Audio and video clipping for electronic media (e.g. AIR.FM,DD etc)

    (Attached Annexure-II: Communication Materials Outline and Sample.)
- **4.0 Capacity Developments:** Capacity building is defined as the creation of an enabling environment with appropriate policy and legal frameworks, institutional development, including community participation, human resources development and strengthening of managerial systems. It is a long-term, continuing process, in which all stakeholders participate. However, capacity building often refers to assistance that is provided to develop a certain skill or competence, or for general upgrading of performance ability (UNDP).

Capacity Building is much more than training and includes the following:

- ➤ **Trainings:** strengthening organization's and community's need for the skills, instincts, abilities, processes and resources that organizations/community need to survive & sustain.
- ➤ **Human resource development (HRD)**, the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables them to perform effectively.

- ➤ Organizational development (OD), the elaboration of management structures, processes and procedures, not only within organizations but also the management of relationships between the different organizations and sectors (public, private and community).
- ➤ Institutional and legal framework development (ILFD), making legal and regulatory changes to enable organizations, institutions and agencies at all levels and in all sectors to enhance their capacities.
- ➤ Infrastructure development (ID), which is known as "Economic Capacity Building", increases the capacity of any developed or developing society to improve trade, employment, economic development and quality of life. It is also true that where institutional capacity is limited, infrastructure development is probably constrained. (PPP)
- Financial capacity building(FCB), which involves achieving adequate cost recovery, lowering cost by increasing management capacity, increasing revenue through careful implementation of the "Polluter Pays Principle" and reinforcement and follow through on cost-recovery practices.
- In Solid Waste Management (SWM) the people, partnerships(PPP), coalitions, resources and skills are essential to its successful implementation and hence all these are included under the large umbrella of the term "capacity development"

#### 4.1 Capacity Building in Solid Waste Management

The approach to capacity building in SWM shall not be only about technology and economics but also about:

- ➤ Understanding the administration systems for waste management and related activities (multidisciplinary and cross-sectoral).
- Understanding the need for human resource development to achieve better results in SWM.
- ➤ Focus on building sound institutions and good governance for attaining improved SWM.
- Delineating strategies for sustenance of achievements.

#### 4.2 Strategic Framework for Capacity Building:

The following diagram illustrates the capacity building framework in general. The framework is premised on four core areas: (i) situation analysis (ii) creating the right vision and mission (iii) drawing up the correct strategy and corresponding action, and (iv) measures for sustainability.

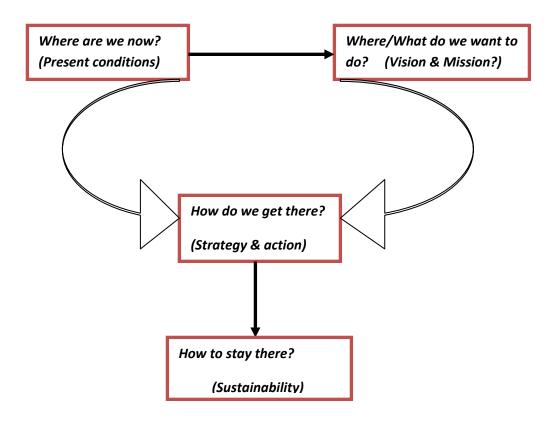


Fig: Strategic Framework for Capacity Building

## 5.0 Action Matrix for IEC & Capacity Development plan on SWM in each ULB of Himachal Pradesh:

SN	Name of activities	No of activities	Stakeholders	Time period	Remarks
1	Workshop	1	Sate level officers and public Representatives and NGO/NYK	Aug 2015	UDD
2	Workshop	1-3 depending upon the size of the town	Town leaders and Volunteers	Sept 2015	UDD
3	IPC		HHS and Community	6 Months	By NYK
4	Community Mobilization			6 Months	By Town leaders and volunteers
5	Radio talk	One per month	Community, ULB	Continued	
6	Mobilization of Rag- Pickers/ Kawadiwala	As per need		Continued	
7	Rag-Pickers	As per need	Convergence with NULM	Continued	

NB: Although, Rag picker mobilization and strengthening is extra part of SWM with convergence of NULM. Under the partnership, we will do the strengthening rag pickers and Kawbadis wala for the collection and segregation of SWM at HHs Level as well as at the waste sorting centre by giving them training and also their capacity development for their livelihood

[2. Annexure-II All possible Communications material and activities outlined.

- 3. Annexure-III- Format: Identification and mobilization plan for the Rag-Pickers/Kawadiwalas.
- 3.1 Annexure-III Format-A: For the Rag-Pickers identification and their movement plan.
- 3.2 Annexure-III Format-B: Knowledge and assessment of Rag pickers on SWM]

#### 6.0. Formats name, design and specification of Communication material

SN	Format Name	Design	Size Standard
		Specification	
1	Hoarding	12ft×8ft	Big size
	Hoarding	8ft×5ft	Medium Size
	Hoarding	5ft×3ft	Small size
2	Banners	6ft×4ft	Big size
	Banners	5ft×3ft	Medium size
	Banners	3ft×2ft	Small size
3	Poster	2ft×3ft	Big size
	Poster	1.6ft×2ft	Medium size
	Poster	1ft×1.6ft	Small Size
4	Pamphlet	5"×7"	4 Page fold
5	Audio/video clipping	30 Sec spot	For FM,IR,DD
6	Brochure on SWM	320mm×460mm	Half fold
7	Slogan	One line to 5 line	In terms of key word slogan

**7.0 Monitoring and Evaluation of IEC & Capacity Development:** To Improve the public participation and behavior change towards the collection, segregation and treatment of Solid waste, Monitoring and evaluation are most important component of communications plan. Monitoring of Communications Initiatives can be done at the various levels including at Inputs, Outputs, Outcomes and Impacts levels.

#### 7.1 Framework of M& E at HHs level as well as at community & Mass Level

- [ 4. Annexure: IV- Frameworks of M& E for SWM
- 4.1 (A): At HHs Level focus behaviors and expected outcomes.
- 4.1 (B): Result of IEC activities at HHS Level
- 4.2 (A): At community level focus behaviors and expected outcomes
- 4.2(B): Result at ward/community level IEC activities.

#### Attachment:

- 1. Annexure-I Format for Base line Survey for NYK
- 1.1 Annexure-I, Format –A: IHHL Status
- 1.2 Annexure-I Format-B: Community Toilet Status.
- 1.3 Annexure-I Format-C: Public Toilet Status
- 1.4 Annexure-I Format-D: SWM Status at HHs Level.
- 1.5 Annexure-I Format-E:.SWM Status at Community / Ward Level.
- 1.6 Annexure-I Format-F: SWM Characteristics and Generation
- 2. Annexure-II All possible Communications material and activities outlined.
- 3. Annexure-III- Format: Identification and movement plan for the Rag-Pickers/Kawadiwalas.
- 3.1 Annexure-III Format-A: For the Rag-Pickers identification and their movement plan.
- 3.2 Annexure-III Format-B: Knowledge and assessment of Rag pickers on SWM
- 4. Annexure: IV- Frameworks of M& E for SWM
- 4.1 (A): At HHs Level focus behaviors and expected outcomes.
- 4.1(B): Result of IEC activities at HHs Level
- 4.2 (A): At community level focus behaviors and expected outcomes
- 4.2(B): Result at ward/community level IEC activities.

Annexure-V - Guiding note for Baseline survey for NYK

### 1.1. Annexure-1 Format-A: IHHL status

Distri	ict-	ULBs name-					Ward	No-				Name of V	Vard Cou	ncilor-							
	1										IHHL	Status									
SN	HHS Name	No of Members in HHs	Members	Members in HHs	Members in HHs	Members in HHs	No of Toilet	То	ving pilet <b>5</b>		tional <b>6</b>	wa Faci	ning ter lities <b>7</b>		_	•			Type of 1 <b>9</b>	<sup>r</sup> oilet	
1 2		3	4	Yes <b>5(I)</b>	No <b>5(II)</b>	Yes <b>6(I)</b>	No <b>6(II)</b>	Yes <b>7(I)</b>	No <b>7(II)</b>	Yes <b>8(I)</b>	No <b>8(II)</b>	If NO, how many? <b>8(III)</b>	Single pit <b>9(I)</b>	Double pit <b>9(II)</b>	Septic tank <b>9(III)</b>	Drain/open sewer linked <b>9(IV)</b>	Other type <b>9(V)</b>				

## 1.2. Annexure-1 Format-B: Community Toilet Status.

									Community	/ Toi	let						
SN 1	N NO HHS in 4		HHs in ward 3				nunity			O& M 7	Need any Communit y Toilet? 8		Community toilet can be converted into public toilet?		Contact no of ward Councilor 10		
			Yes <b>4(I)</b>	No <b>4(II)</b>	Yes <b>5(I)</b>	No <b>5(II)</b>	Yes <b>6(I</b> )	No <b>6(II)</b>	If no, How Many? <b>6(III)</b>	Yes <b>7(I</b> )	No <b>7(II)</b>	If Yes, name <b>7(III)</b>	Yes <b>8(I)</b>	No <b>8(II)</b>	Yes <b>9(I)</b>	No <b>9(III)</b>	

### 1.3 Annexure-1 Format-B: Public Toilet Status

							F	Publi	c Toi	let					
SN	Ward no	No of Public	Const	ructed 1	Funct	tional	us	ing sed 6			0& M 7	Gene	enue rated? 8	Interested	_
1	2	Toilet 3	Yes 4(I)	No 4(II)	Yes 5(I)	No 5(II)	Yes 6(I)	No 6(II)	Yes 7(I)	No 7(II)	If yes, Managed by 7(III)	Yes 8(I)	No 8(II)	Yes 9(I)	No 9(II)

#### 1.4 Annexure-1 Format-D: SWM Status at HHs Level

	District-			ULBs-					ward N	0-				
SN <b>1</b>	NO OT N HHs Name member		Collection Practices 5			Prac	egatio n tices <b>6</b>		separate ition and <b>7</b>			methods of treatment peing used at HHS? 8		
1	2	3	Biodegradable <b>4(I)</b>	Yes <b>5(I)</b>	No <b>5(II)</b>	Yes <b>6(I)</b>	No <b>6(II)</b>	Green 7(I)	Yellow 7(II)	any other <b>7(III)</b>	Yes <b>8(I)</b>	No <b>8(II)</b>	Methodology 8(III)	

## 1.5 Annexure-1 Format-E SWM status at Community/Ward level:

						SWM <sub>F</sub>	oractice	s at Co	mmur	ity/W	ard lev	rel					
			Colle	ction	Pro	per	Wa	ste	Bio	gas	Compo	osting	Ver	mi	RDF	plant	Any method
			cer	itre	transpo	rtation	Sort	ting	plo	ınt	8	3	compo	osting	1	10	(list here)
SN	Ward NO		4	4	5	;	Center	(MRF)	7				9				11
1	2	No of HHs					6	5									
		in ward	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
		3	4(I)	4(II)	5(I)	5(II)	6(I)	6(II)	7(I)	7(II)	8(I)	8(II)	9(I)	9(II)	10(I)	10(II)	
																	<u> </u>

## 1.6 Annexure-1 Format-F: Format for Waste generation and characterizations

District	ULB name			Ward no				
				Waste Generatio	ons(kg)(MSW catego	ories)		
HHS name 1	Wet 2	Dry 3	Sanitary 4	Garden 5	HHs Hazardous 6	Debris/Rubbish 7	E-Waste 8	Others 9

2. Annexure-II

All possible Communications material and activities outlined

	All possible Communications material and activities outlined																
						-		-					IEC activ	rities ar	nd C	apacity	
	1	1	1		Comm	unicatio	n Materia	als					Develop	ment			
SN	District	Name Of ULBs	Population	No of ward	one Hoarding per MC (Big size) at entry point of MC	one Hoarding per Ward(Medium Size) at Entry point of ward	One Hoarding per Ward(Small Size at Public places)	2 Poster per ward	Pumphlet per 10 person	1 Banners /Ward(Big & Small size)	Slogan on public transport	Audio/Video Cliping	IPC at HHS(20HHs per day)	1 Community Mobilisation per ward		Audio/Vedio shows for Community Radio,Local FM(30 sec shot)	
1	Shimla	M.Corpn. Shimla.	169578	25	1	25	25	50	16957	25	5	1	16957	25	1	1	10
2	Shimla	M C, Rampur	5655	7	1	7	7	14	565	7	5	1	565	7	1	1	10
3	Shimla	M C, Theog	4353	7	1	7	7	14	435	7	5	1	435	7	1	1	10
4	Shimla	M C, Rohroo	6875	7	1	7	7	14	687	7	5	1	687	7	1	1	10
5	Shimla	N P, Chopal	1851	7	1	7	7	14	185	7	5	1	185	7	1	1	10
6	Shimla	N P, Narkanda	901	7	1	7	7	14	90	7	5	1	90	7	1	1	10
7	Shimla	N P, Kotkhai	1190	7	1	7	7	14	119	7	5	1	119	7	1	1	10
8	Shimla	N P, Jubbal	1640	7	1	7	7	14	164	7	5	1	164	7	1	1	10
9	Shimla	N P, Suni	2591	7	1	7	7	14	259	7	5	1	259	7	1	1	10
10	Solan	M C, Solan	39256	13	1	13	13	26	3925	13	5	1	3925	13	1	1	10
11	Solan	M C, Nalagarh	10708	9	1	9	9	18	1070	9	5	1	1070	9	1	1	10
12	Solan	M C, Parwanoo	8758	9	1	9	9	18	875	9	5	1	875	9	1	1	10
13	Solan	M C, Baddi	29911	9	1	9	9	18	2991	9	5	1	2991	9	1	1	10
14	Solan	N C, Arki	3040	7	1	7	7	14	304	7	5	1	304	7	1	1	10

					Communication Materials							IEC activities and Capacity Development						
					Comm	unication	i wateria	ais	l	1				ment	1			
SN	District	Name Of ULBs	Population	No of ward	one Hoarding per MC (Big size) at entry point of MC	one Hoarding per Ward(Medium Size) at Entry point of ward	One Hoarding per Ward(Small Size at Public places)	2 Poster per ward	Pumphlet per 10 person	1 Banners /Ward(Big & Small size)	Slogan on public transport	Audio/Video Cliping	IPC at HHS(20HHs per day)	1 Community Mobilisation per ward	Workshop	Audio/Vedio shows for Community Radio,Local FM(30 sec shot)	activities(School Rallies,Quize,essay and Slogan Competions per	
		N C, Rajgarh																
15	Solan		3083	7	1	7	7	14	308	7	5	1	308	7	1	1	10	
16	Sirmaur	M C, Nahan	28899	13	1	13	13	26	2889	13	5	1	2889	13	1	1	10	
17	Sirmaur	M C, Paonta	25183	11	1	11	11	22	2518	11	5	1	2518	11	1	1	10	
18	Bilaspur	M C, Bilaspur	13654	11	1	11	11	22	1365	11	5	1	1365	11	1	1	10	
19	Bilaspur	M C, Nainadevi ji	1204	7	1	7	7	14	120	7	5	1	120	7	1	1	10	
20	Bilaspur	M C, Ghumarwin	7899	7	1	7	7	14	789	7	5	1	789	7	1	1	10	
21	Bilaspur	N P, Talai	2372	7	1	7	7	14	237	7	5	1	237	7	1	1	10	
22	Una	M C, Una	18722	11	1	11	11	22	1872	11	5	1	1872	11	1	1	10	
23	Una	N P, Santokgarh	9363	9	1	9	9	18	936	9	5	1	936	9	1	1	10	
24	Una	N P, Daulatpur	3763	7	1	7	7	14	376	7	5	1	376	7	1	1	10	
25	Una	N P, Gagret	3847	7	1	7	7	14	384	7	5	1	384	7	1	1	10	
26	Una	N P, Mehatpur	9218	9	1	9	9	18	921	9	5	1	921	9	1	1	10	
27	Hamirpur	M C, Hamirpur	17604	11	1	11	11	22	1760	11	5	1	1760	11	1	1	10	

													IEC activ	ities a	nd C	apacity	
					Comm	unication	Materia	als					Develop			. ,	
SN	District	Name Of ULBs	Population	No of ward	one Hoarding per MC (Big size) at entry point of MC	one Hoarding per Ward(Medium Size) at Entry point of ward	One Hoarding per Ward(Small Size at Public places)	2 Poster per ward	Pumphlet per 10 person	1 Banners /Ward(Big & Small size)	Slogan on public transport	Audio/Video Cliping	IPC at HHS(20HHs per day)	1 Community Mobilisation per ward	Workshop	Audio/Vedio shows for Community Radio,Local FM(30 sec shot)	activities(School Rallies,Quize,essay and Slogan Competions per
28	Hamirpur	N P, Sujanpur	7943	9	1	9	9	18	794	9	5	1	794	9	1	1	10
29	Hamirpur	N P, Nadaun	4430	7	1	7	7	14	443	7	5	1	443	7	1	1	10
30	Hamirpur	N P, Bhota	1453	7	1	7	7	14	145	7	5	1	145	7	1	1	10
31	Kangra	M C, Dharamshala	30764	11	1	11	11	22	3076	11	5	1	3076	11	1	1	10
32	Kangra	M C, Kangra	9528	9	1	9	9	18	952	9	5	1	952	9	1	1	10
33	Kangra	M C , Nurpur	9807	9	1	9	9	18	980	9	5	1	980	9	1	1	10
34	Kangra	M C, Palampur	3543	7	1	7	7	14	354	7	5	1	354	7	1	1	10
35	Kangra	M C, Nagrota	5900	7	1	7	7	14	590	7	5	1	590	7	1	1	10
36	Kangra	N P, Jawalamkuhi	5361	7	1	7	7	14	536	7	5	1	536	7	1	1	10
37	Kangra	N P, Dehra	4816	7	1	7	7	14	481	7	5	1	481	7	1	1	10
38	Chamba	M C, Chamba	19933	13	1	13	13	26	1993	13	5	1	1993	13	1	1	10
39	Chamba	M C, Dalhousie	7051	9	1	9	9	18	705	9	5	1	705	9	1	1	10
40	Chamba	N P, Chowari	3770	7	1	7	7	14	377	7	5	1	377	7	1	1	10
41	Mandi	M C, MandI	26422	13	1	13	13	26	2642	13	5	1	2642	13	1	1	10

													IEC activ		nd C	apacity	
					Comm	unication	Materia	als	I			Т	Develop	ment		1	
SN	District	Name Of ULBs	Population	No of ward	one Hoarding per MC (Big size) at entry point of MC	one Hoarding per Ward(Medium Size) at Entry point of ward	One Hoarding per Ward(Small Size at Public places)	2 Poster per ward	Pumphlet per 10 person	1 Banners /Ward(Big & Small size)	Slogan on public transport	Audio/Video Cliping	IPC at HHS(20HHs per day)	1 Community Mobilisation per ward		Audio/Vedio shows for Community Radio,Local FM(30 sec shot)	activities(School Rallies,Quize,essay and Slogan Competions per
42	Mandi	M C, Sundernagar	24344	13	1	13	13	26	2434	13	5	1	2434	13	1	1	10
43	Mandi	N P, Jogindernagar	5335	7	1	7	7	14	533	7	5	1	533	7	1	1	10
44	Mandi	N P, Sarkaghat	4715	7	1	7	7	14	471	7	5	1	471	7	1	1	10
45	Mandi	N P, Rewalsar	1821	7	1	7	7	14	182	7	5	1	182	7	1	1	10
46	Mandi	N P, Karsog	4254		1			0	425		5	1	425		1	1	10
47	Kullu	M C, Kullu	18536	11	1	11	11	22	1853	11	5	1	1853	11	1	1	10
48	Kullu	M C, Manali	8096	7	1	7	7	14	809	7	5	1	809	7	1	1	10
49	Kullu	N P, Bhunter	4475	7	1	7	7	14	447	7	5	1	447	7	1	1	10
50	Kullu	N P, Banjar	1414	7	1	7	7	14	141	7	5	1	141	7	1	1	10
		Total	644829	433	50	433	433	866	64464	433	250	50	64464	433	5 0	50	10

## 3. Annexure-III- Format: Identification and movement plan for the Rag- Pickers/Kawadiwalas.

## 3.1 Annexure-III Format-A: For the Rag-Pickers identification and their movement plan

		F	ormat	-A: for t	he Rag	-Pickers identific	ation and their mo	vement plan		
Name 1			Age Group(Years) 4				Education 5	Income per day(INR) 6	How many area visited per day(Number) 7	List name of area (Specific waste site wise) 8
			6- 14 4(I)	15-25 4(II)	>25 4(III)	Under matriculate 5(I)	Above Matriculation 5(II)	Income	How mar per dc	List no (Specific v
										1
										2
										3
										4
										5
										6
										1
										2
										3
										4
										5
										6

## 3. Annexure-III- Format: Identification and movement plan for the Rag- Pickers/Kawadiwalas

## 3.2 Annexure-III Format-B: Knowledge and assessment of Rag pickers on SWM

		Annexu	ıre-V For	mat-B: K	nowleda	ge assessn	nent of Ra	ıq pickers	on SWM						
		Annexure-V F		Are you aware about the waste natures?				e about ti 5			nt?	an give you	te collection t Waste site	te Sorting	works affects th?
SN 1	Name 2	Address 3	Wet Waste 4(I)	Dry Waste 4(II)	Inert waste 4(III)	Collection & segregation 5(1)	Waste sorting 5(II)	Biogas plant 5(III)	Vermicomposting 5(IV)	Composting 5(V)	Others any 5(VI)	Are aware waste can give you money 6	Interested for waste collection and segregation at Waste site level 7	Intrested to Waste. 8	Are you Aware this works affects your health? 9
1															
2															
3															
4															
5															
6															

#### 4. Annexure: IV- Frameworks of M& E for SWM

#### 4.1 (A): At HHs Level focus behaviors and expected outcomes.

	4.1 (A). At HHs level focus behaviours and expected outcomes.										
SN	Focus Behaviours	Key Behaviours	Stakeholders	Expected Outcomes							
1	Collection & Segregation of Solid waste at HHS	1.Use colour coded bins for Collection and Segregation I.Greer bins for Bio-degradable waste  II.Yelow bins for Non- Biodegradable waste	Family; Men, women and Child	1.All family member should have knowledge about the collection and segregation of SW  2.All HHs having all two coloured bins.  3.All two coloured bins are being used for collection & segregations							
		Composting at HHS level     Vermi composting at HHs level		1 All HHS having any type of Treatment options of SW     I. HHS having composting unit							
2	Treatment of SW	3 Any others options	Family; Men,women and Child	II. HHs having vermin composting unit III. HHS having any others options of treatments of SW							

#### 4.1 (B). Result at HHs level IEC activities

SN	Input/activities	Output	Outcomes	Impacts
	IPC for Collection &		1.All family member should have knowledge about the collection and segregation of SW	% Changes of HHs in collection &
1	segregations of SW	All HHs should covered by IPC	2.All HHs having all three coloured bins.	segregations of SW at HHs
			3.All three coloured bins are being used for collection & segregations	
			1 All HHS having any type of Treatment options of SW	
2	IPC and Sharing of Knowledge on treatment	All HHs should covered by IPC	I. HHS having composting unit	% changes of HHs on the treatment
-	options of SW	This should covered by it c	II. HHs having vermicomposting unit	options of SW
			III. HHS having any others options of treatments of SW.	

## 4. Annexure: IV- Frameworks of M& E for SWM 4.2 (A): At community level focus behaviors and expected outcomes

	A. At Community level focus behaviours and expected outcomes.										
SN	Focus Behaviours	Key Behaviours	Stakeholders	Expected Outcomes							
1	Collection & Segregation of Solid waste at Community level	1 Community have been putting waste into the bins at the community point.	Community	1.All Community should have knowledge about the collection and segregation point at the community for SW.							
		1 Composting at Community level		1 All community having any type of Treatment options of SW							
		2 Vermi composting at Community level		I. Community having composting unit(CCU)							
2	Treatment of SW	Biogas plant	Community	II. Community having vermin composting unit(CVU)							
		Sanitary Land fills		III. Community having any others options of treatments of Swlike Biogas plant and sanitary land fill							

### 4.2(B). Result at ward/Community level IEC activities

SN	Input/activities	Output	Outcomes	Impacts
1	Workshop at ward leaders	All ward leaders should be covered at workshop  All influencers should covered by Workshop	1.All ward leaders should have knowledge about the collection and segregation of SW  2.All ward leaders know about all three coloured bins.  3.All ward members are involved for the community mobilization	% Changes of Ward leaders knowledge about collection & segregations of SW .

1 All community having any type
of Treatment options of SW

			or rreatment options of 5w	
2	Workshop at Community level		I. Community having composting unit(CCU)	% changes of Community on the treatment options of SW
			II. HHs Community vermin composting unit(CVU)  III. Community having any others options of treatments of SW	
3	Community Mobilisation with town leaders and supporting Org(NYK)	after discussion		
4	Involvement of influencers and FLWs for Community Mobilisation	after discussion		
5	Institutions involvement (School College)	after discussion		

SN	Key Behaviours	Stakeholders	Expected Outcomes
1	1 All MC having prope & segregation facilities	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.All MC should have knowledge about the collection and segregation for SW.
	1 Composting at all w	ard	1 All MC having any type of Treatment options of SW
	2 Vermicompostin at level		I. All MC having composting unit(CU)
2	Biogas plant Sanitary Land fills	MC	II. MC having vermicomposting unit(VU)
			III. MC having any others options of treatments of Swlike Biogas plant and sanitary land fill

SN		Output	Outcomes	Impacts
1	All town leaders should be coverd at workshop	1.All town leaders should have knowledge about the collection and segregation of SW  2.All town leaders know about all three coloured bins.	- % Changes of MC knowledge about collection & segregations of SW .	
		3.All town leaders are involved for the mass mobilisation		
2	All influencers should covered by Workshop		1 All MC having any type of Treatment options of SW	
		I. MC having composting unit.	% changes of MC on the treatment options of SW	
		II. MC having vermicomposting unit.		
		III. MC having any others options of treatments of SW		
3	ā	after discussion		
5	ā	after discussion		

### **Guiding note for Baseline survey for NYK**

General guidelines for all formats:

- 1 Put the 1 against to response of answer for all formats of Base line.
- 2 No any tick marks against the response.
- 3 Put the Numerical value without any subscripts or indicators such as for 8(III) of annexure-I, Format-A,IHHL Status, put only figure 2or 3 whatever be but no any word like family members etc.

#### For Annexure: I- Format-A: IHHL Status

#### 1 IHHL means Individuals Household latrines.

- 2 For Column (6): 6(I) Functional "yes": means toilet having all superstructure & substructure are likely to use but toilet is not being used.
- 6(II) Functional "No": means toilet having defunct superstructure as well as substructure and are not likely to use.
- 3 For Column for 7: Running water Facilities: Any kind of water facilities for the toilet use and O&M inside the toilet.
- 4 For Column 8: Being used by all members of your family: If all family members are using toilet put the 1 against to yes and if few members are not using the toilet then put 1 against to NO and also put the numbers of family members whose are not using in column 8(III).

#### 5 Type of toilet for column (9):

- (i) Column 9(I): Single pit toilet: Toilet having single soak pit or any single pit connected to toilet for feacal matter storage.(Except Septic tank)
- (ii) Column 9(II): Double pit: Toilet having double pit soak pit or any other double pit connected to toilet for faecal matter storage. (Except septic tank)
- (iii) Column 9(III): septic tank: A anaerobic big tank(single often) connected to the toilet and its need to do empty time to time by machine or manuals is called as septic tank.
- (iv) Column 9(IV): Drain open/Open sewer linked toilet: The toilet which outlet is connected to either open drain or open sewer.
- (v) Column 9(V): Other type: Any local type toilet which is existing other than single pit, double pit, septic tank, drain or open sewer linked toilet as already covered in column 9(I,II,III,IV).

#### Annexure-I, Format-A: Community toilet status.

Column 6(III): Put number of HHs which are not using community toilet?

Column(9): Public toilet means the toilet constructed at the public places like market, urban Haat, Congregation places and govt places.

#### <u>Annexure-I, Format-A: Public Toilet Status.</u>

Column 7(III): Put the name of body/Organisations/NGOs/MC which managed the operation & maintenance of this toilet.

Column 9: Partnership between Public entities (Govt/MC representatives) and private organization/Corporation etc to deliver the good services and infrastructures of public toilet.

#### <u>Annexure-II, Format-B: SWM</u>

Column 4(I): Biodegradable waste means those waste can be degraded easily.

#### List of Bio-degrable Waste:

- 1 Vegetables and fruit peels,
- 2 Food residue (Cooked and uncooked both)
- 3 Expired food items
- 4 Meat, bone & egg shell
- 5 Tea bag and coffee powder (After using)
- 6 Coconut shell and fiber etc
- 7 Garden waste &
- 8 Kitchen waste etc.

NB: Don't include medical and sanitary waste (like syringe, disposal & used sanitary napkin, Diaper, dead pest, Ear Buds, Dental floss, Bandage etc)

Column 4(II): Dry waste: The list of dry waste:

1 Plastic

- 2 Papers
- 3 Wood
- 4 Glass
- 5 Rubbers

NB: Don't include medical waste, House hold Hazardous waste such as medicines, pesticides, old paints, Hair Colour, Mosquito Repellent, and sanitary waste (like syringe, disposal & sanitary napkin etc) & also E-Waste such as Tube lights, CDs, Batteries, Computers, Televisions, Mobile phones, Laptops, Printer cartridge and cables.

**Column 5: Collection** means wastes are properly collected and is kept in bins.

**Column 6: Segregation** means wastes are collected in separate bins such as biodegradable in Green Bin & Non Biodegradable in Yellow bins.

Column 7(I): Biodegradable waste in Green Bin

Column 7(II):Non-biodegradable in yellow bin

**Column 7(III):** If any local types of bin are being used by HHs, put the name of which type.

#### Column 8: Methods of treatment listed here:

- 1 Composting: Put the waste in pit to be compost
- 2 Vermicomposting: Compost is being formed by using of earthworms.
- 3 RDF: Refused Derived fuel technology
- 4 Biogas plant
- 5 Sanitary Land fills
- 6 Any others method at local level.

**Column 8(III):** Put the number of methodology from above list.

NB: We can use this format for Commercial establishments also. Put the name of Commercial unit in place of HHs Name.

Annexure-I. Format-B: SWM status at community/Ward level.

Column 4: Collection centre: means collection center at Community level/Ward level

**Column 5: Proper Transportation:** means some vehicles are being engaged for the transportation of waste from the point of collection to the point of treatment/disposal in very hygienically and at proper frequency (Before degradations & fouling of waste).

**Column 6: Waste Sorting Center (MRF):** means any waste sorting center where valuable waste/economical wastes are being sorted/ segregated before putting to treatment.

Column 6(III): Who is doing Waste sorting work? Put the name of in two subheadings:

- 1 Rag pickers
- 2 Kawadiwala
- 3 Others employed by MC authority.

**Column 7: Biogas plat:** The plant which is being used for the methanation for methane Productions as fuels.

**Column 8: Composting**: means wastes are being used for the compost production.

**Column 9: Vermicomposting**: means wastes are being used for the compost production by using earthworms.

**Column 10: RDF** means refused Derived Fuel i.e. pelletization /Fluffing of waste for fuels productions.

**Column 11:** If any methods of treatments are being used at local level ,list the name of that methodology.

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