

**Government of Himachal Pradesh
Rural Development Department**

No . SMG-7/2009-RDD(TSC)-SLWM- Dated Shimla-9 ²⁰ April,2011

NOTIFICATION

In order to achieve the goal of ' Nirmal Himachal ' by providing Safe Drinking Water, Personal Hygiene and Environmental Cleanliness in the rural areas of State and also for ensuring the sustainability of the Sanitation Campaign , a Gram Panchayat specific action plan for effective Solid and Liquid Waste Management, based on **REDUCTION AND SEGREGATION OF WASTE AT THE SOURCE, EFFECTIVE MANAGEMENT OF WASTE AND USE OF WASTE FOR INCOME GENERATION**, is hereby notified as Annexure-A.

by order
**Secretary (RD&PR) to the
Government of Himachal Pradesh, Shimla**

Endst.No. SMG-7/2009—RDD(TSC)SLWM- Dated: 20 April,2011

Copy along with action plan forwarded for information and necessary action to :-

1. The Additional Chief Secretary (Env. S&T) to the Govt. of HP, Shimla.
2. All the Deputy Commissioners-cum-CEOs(DRDAs) in Himachal Pradesh.
3. All the Project Officers(DRDAs) in Himachal Pradesh.
4. The Deputy Director, Panchayati Raj Department, Himachal Pradesh, Shimla
5. The Private Secretary to Secretary(RD) Himachal Pradesh, Shimla-2
6. All the Block Development Officers, in HP with the direction to supply copy of action plan to each GP in the block.
7. Guard file.


**Special Secretary (RD&PR) to the
Government of Himachal Pradesh, Shimla**



ANNEXURE-A

Action Plan for Implementation of Solid & Liquid Waste Management in Gram Panchayats of Himachal Pradesh

Background:

In order to achieve the dream of Nirmal Himachal besides ensuring Open Defecation Free environment, the Panchayats are also required to work towards the goal of guaranteed Safe Water, Personal Hygiene and Environmental Cleanliness through Solid and Liquid Waste Management. This is also needed to achieve goal of **Clean Himachal Healthy Himachal (Swwach Himachal Swwasth Himachal)**. Therefore Panchayats need to be encouraged towards adopting the SLWM as a way of life in the rural areas of the State. This is essential not only for ensuring the sustainability of the Sanitation Campaign but also to apprise Panchayats and PRI members about their statutory obligations. **Under sections 12, 13 and 15 of the H.P. Panchayati Raj Act 1994, it is the duty of the Panchayats.** To enable Panchayats to carry out this task, the State Government has already released funds under 13th Finance Commission to all the Gram Panchayats, Panchayat Samities and Zila Parishads for undertaking waste management.

Under lying Philosphy of the Panchayat level SLWM: The basic objective Waste Management mechanism will be three R's i.e. Reduce, Reuse and Recycle. In addition to the above the Panchayat shall also consider the following other important Waste Management objectives:

- **Reduction at Source** with emphasis on the Zero Waste/ Reduced Waste generation.
- **Segregation of Waste at the Source for Effective and safe management of waste at Zero Waste Management Centres.**
- Waste disposal with stress on **income generation** through capacity building (composting and recycle of waste).
- For the Resource generation the policy of the "**Polluter Pays**" should be followed.

Implementation of the Waste Management plan: Within the Panchayats, waste generation could be attributed to its inhabitants, transit population and also

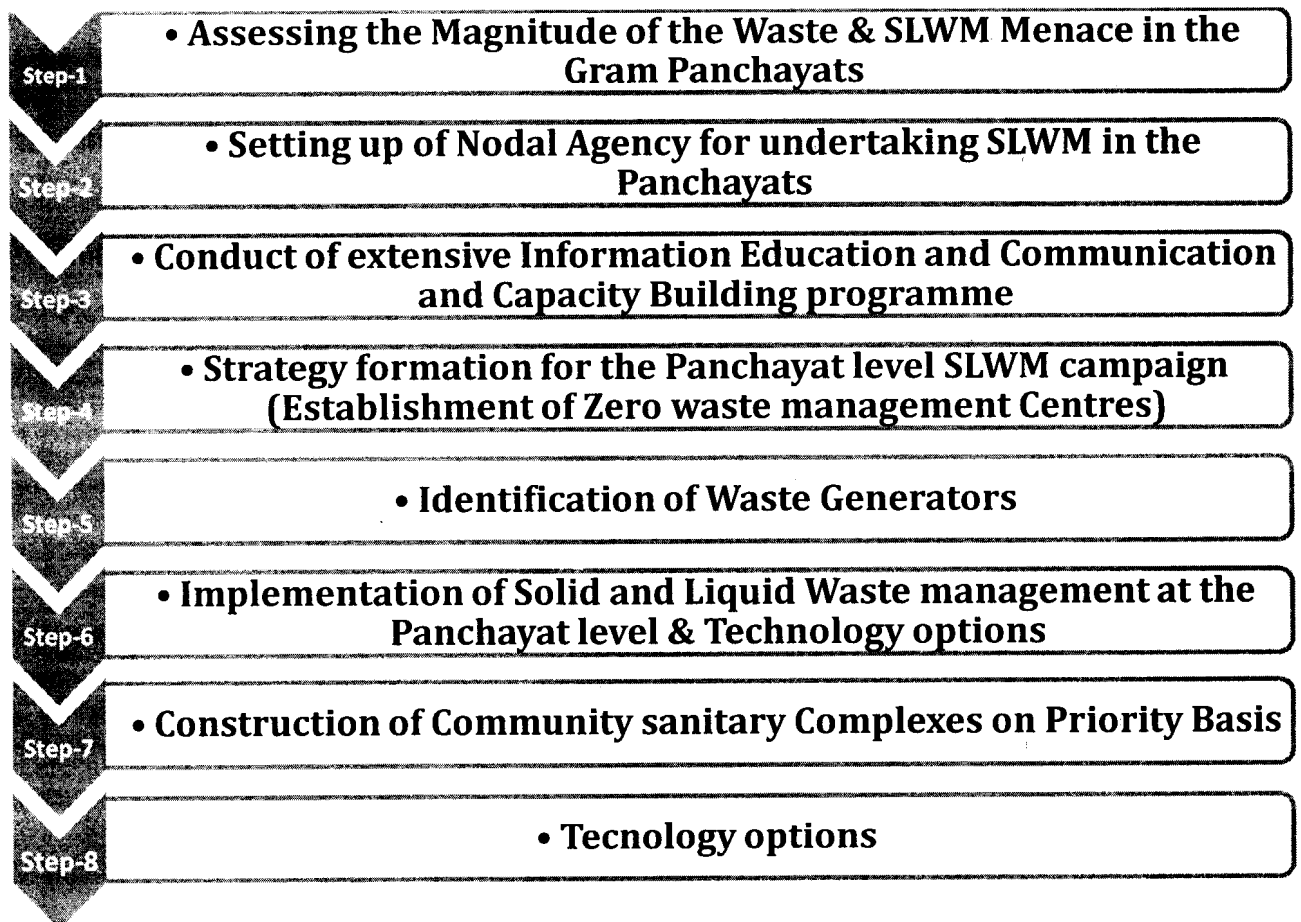
Total Sanitation Campaign, Himachal Pradesh



commercial establishments which exist within its jurisdiction. In case Waste Management arrangements require the coordinated efforts of more than one Panchayat (large producers/ scattered area mechanism) then in such circumstances the Panchayat Samiti will be obliged to coordinate the waste management activities of these Panchayats with the support of the local administration.

The Panchayats could take up Waste Management within their jurisdiction by following the under mentioned steps:

Steps for the SLWM in the Gram Panchayat



Step-1:- Assessing the Magnitude of the waste & SLWM menace in the Gram Panchayat:

For initiating the SLWM in the Panchayat, the following information would be required beforehand;



- **Base line survey of the GP:** Panchayat will conduct a base line survey by analyzing the waste generation (**Waste Audit**) of the Panchayat covering each household with the quantum and type of waste generated per day by taking into consideration No. of Households and their location together with total population with the amount/ type and Quantum of solid and liquid waste generated per day **focus on large waste generating sectors.**
- Conduct the **Safai Padyatra** (transect walks) in the Panchayat area with the community.
- **Attitude of the local population** towards SLWM and **existing system and practice of waste management.**
- Details of **vacant spaces/land available** in the local body.
- **Details and activities of NGOs & CBOs**, e.g. Women Self help Groups etc available in the village.
- **Sanitation and Hygiene related activities**, if carried out **by any other government agency/ department** (any support from the line departments).
- **Existing resources** generated by the Panchayat for the SLWM, if any.
- **Identification of resources which could support the SLWM** at the Panchayat level with focus on commercial/ tourist/ religious/ industrial establishments.

Step-2:- Setting up of Nodal agency for undertaking SLWM in the Panchayat:

The second step of the SLWM at the Panchayat level will be to create a functional Gram Panchayat level Village Level Health and Sanitation Committee which will be designated as the nodal agency (would be compulsorily be set up for the Panchayats where the quantum of waste generated is more) for ensuring the sustainability of the Open Defecation Free status within its jurisdiction through SLWM such committees already stand constituted in maximum of GPs, if not GP shall take steps to constitute the committee immediately. This committee will work under the leadership of the Panchayat and will ensure that;

- It gets the **approval of the community on the issue of SLWM** and creates a favorable environment for undertaking SLWM in the Panchayat through frequent meetings and discussion in the Gram Sabha. It will also educate the



community for **enforcing the provisions of PR Act** for raising the required funds by imposing sanitation cess etc. and enforce the penal provisions.

- The required **support from the Line departments, Local Administration** and other allied departments is assured.
- The **Gram Sabha identifies and also selects some MMs/ YMs/ SHGs/ any other CBO which could take up the daily implementation of SLWM** at the Panchayat level.

Step-3:- Conduct of extensive Information Education and Communication and Capacity building programme:

The Panchayat along with the nodal agency will launch an extensive campaign for creation of favourable environment within the community with focus on sustainability of the Sanitation achievements through the SLWM for which the following activities are required to be carried out:

- **Identification and segregation of different waste producers** into quantity, type, recyclable, non-recyclable and area wise. Segregation of waste at the source should be propagated.
- Also propagate the **linkage between the ODF status and proposed SLWM activities.**
- After the identification of the waste producers as Households, Commercial Establishments, Market Places and Floating Population **following strategies should be drawn up:**
 - For the small and the household waste producers they will be encouraged through the **interpersonal communication** to dispose the waste generated at the source.
 - In case of the Large producers, besides interpersonal communication the **use of Community pressure and other media resources** like school Children committees, Kala Jathas, Village Level Motivators, Devta Committees, Masons, Posters, Wall writings, Songs & Dramas, Slogans in the local dialects and Local Press could be made use of.



- **Bring a sense of self-esteem in the community** for encouraging itself to live in a clean and healthy environment.
- Community to **take up SLWM at the individual level** with available technology options.
- **Increase the income of the Panchayat** through Income Generation Scheme for the Panchayats.
- Inclusion of **SLWM as the regular agenda item in the Panchayat and Gram Sabha meetings** and take up **penal provisions** for defaulters.
- **Apprise the Panchayats and the PRI representatives** about their role and powers under the Panchayati Raj Act in maintenance of hygienic and sanitary conditions within their jurisdiction.
- Introduction to **various technologies for the waste management** at the Panchayat level, to the PRI Representatives, Executing Agency, NGOs and Social Groups like MMs/ YMs/ other CBOs, Masons and the other User Group (Household members, Shopkeepers). The trainings would include;
 - Skill improvement for segregation of waste at source.
 - Provision for sanitary facilities, such as Soakage Pits, Composting/ Vermi-Composting, Bio- Gas plants, Washing Platforms.
 - Recycle of waste to prospective users.
 - Convergence of sanitation with other schemes of the Government for income generation activities.
- **Improving skill** of PRIs, Executing Agencies and Motivators for carrying out IEC for community behaviour change.

Step-4:- Strategy formation for the Panchayat level SLWM campaign (Establishment of Zero waste management Centres):

For executing SLWM activities the Panchayat will consider the following:

- **Divide the Panchayat into an area/ ward** and draw a community agreeable specific strategy with focus on type/ quantity of waste generated.



- **Fixation of penal provisions by the Gram Panchayat** against the SLWM defaulters.
- **Incorporate** Pollution control Board **SLWM regulations at the Gram Panchayat** level.
- For ensuring the **strict vigil on the defaulters**, establish vigilance committees (to include the MMs/ YMs/ PRIs/ Panchayat level functionaries from the Line Departments/ Children groups/ Local Level NGOs Panchayat Secretaries/ Shayaks/ Health workers/ AWWs, and Village Level Motivators) to make SLWM a way of life.
- **Gram Panchayat will also assign duties** to ward members/ village level Sanitation Committee members for mobilizing all the Stakeholders in the Waste Management and will also **consider the various schemes** like vermi-composting , Biogas, Recycle of Animal Waste & Waste Paper, Arrangements with Kabbadiwalas, land fill options besides seeking support of the other Departments.
- Provide **trainings on community mobilization & hygiene education related activities**, for segregation of waste at the source.
- **Resource augmentation** scheme from the Department of Panchayati Raj, Govt. of H.P, shall be adopted in the Panchayat.
- Among the **technology options to be selected** for SLWM both at household as well as community level the focus would be laid involving the community through Convergence of SLWM with SGSY/ ICDS/ SSA/ MGNREGs, other income generation schemes of the Government by:
 - Initiating community into Composting/ vermi-composting and Bio Gas utilization.
 - Usage of grey water for the irrigation and kitchen garden purposes.
 - Employment of Kabbadiwalas and the disposal of plastic waste to the PWD.
- Establishment of Zero Waste Management Centres at the Panchayat level at appropriate location which is accessible to all the major Waste producers will be



the focal point of the waste management strategy of the Panchayat with following considerations:

- For the large producers (more than 100KGs per Day)/ scattered area, decentralized mechanism for the collection & disposal of waste will be established.
- In case of small producers centralized waste management centres having a centralized agency/ CBO for collection, processing and disposal of waste should be engaged.
- Panchayats which are in the vicinity of the industrial / religious / tourist centers such ZWM centres should be established with the support of the local Temple Trusts, Industrial and Hotel associations.
- Besides the establishment of the ZWM centres the Panchayat/ Executing agency should engage need based persons for collection of waste with some vehicle/ cycle rickshaw for waste collection purposes.
- For door to door collection of waste, a homogeneous group of Gram Panchayats in a particular area can hire small Tempo by outsourcing the task in overall guidance of BDO/Block Sanitation Coordinators

Step-5:- Identification of Waste Generators:

While setting up the mechanism for SLWM, the Panchayat along with Executing agency will carry out steps to identify the waste generators and for this divide its area into Residential/ Commercial areas depending upon type and quantity of waste generated which will be classified into following:

- I. **Gram Panchayats or Residential areas which are remote and rural in nature:** Since some areas in certain GPs are remote , purely rural in nature (**situated in small hamlets**) and do not generate much waste, the Panchayat with the concurrence of the Gram Sabha will take up following activities in such areas;
 - a) **All the households** falling under such rural areas of the Panchayat **should be covered.**



- b) Stakeholders would be **told about the need for segregation of waste at the source.**
- c) To create a sense of ownership to the waste management programme, the Panchayat will **impose a moderate Sanitation fee/ cess** on the entire household.
- d) Bio degradable waste will be collected daily (kitchen waste to be disposed of either by feeding it to the cattle or taking it direct to the composting and animal waste disposal is ensured by composting/ vermi-composting or installing Bio Gas units).
- e) **Non Bio-degradable waste** would also be **collected on daily basis.**
- f) For small waste generation Panchayat/ Executing agency could decide to dispose of the waste at the local level.
- g) **Residential areas of the Panchayat which are being used by the migratory labour/ transient population** for the accommodation purposes (labour colonies, Dharamshals/ Sarais) in such cases the land lords or the administrators of these premises will ensure safe disposal of waste generated.

II. Gram Panchayats in sub urban areas or Residential areas in the nature of urban localities: Such residential areas of the Panchayat generally face the peculiar problems in the form of large density of population, congested localities, houses having multi storied structures and scarce availability of the land for the community purposes. In order to deal with such conditions, the Panchayat with the approval of the Gram Sabha would carry out the following activities under the waste management plan:-

- a) **All the households and existing commercial establishments within such areas would be covered** under the waste disposal scheme.
- b) **Segregation of waste at source will be** mandatorily required to be done by each household or commercial establishment.



- c) For promoting sense of ownership in the waste management programme, the **Panchayat will impose a moderate Sanitation fee/ cess** on the all stakeholders.
- d) Buildings which are occupied by the tenants, land lords could be charged a sanitation fee of Rs. 50/- to 100/- per month depending on the size let out per tenant.
 - 1. For the Bio-degradable waste the Panchayat / Executing agency will ensure that it is **daily collected** and in case of **animal waste** its disposal will be ensured by **composting/ vermi-composting or installing Bio Gas units.**
 - 2. **Construct community toilets** where there is lack of space for individual toilets.
- e) **Non Bio-degradable waste should be collected** from each household on daily basis.

III. Commercial establishments/ Market Places: Commercial establishments/ market places should be identified as the largest resource generators for the SLWM activities in the Panchayat. The Panchayat should impose sanitation cess/ fee on such establishments on the basis of waste generation by further dividing them into:

- a) **Hotels / Restaurants / Resorts/ Small Dhabas: Large Hotels would be asked to manage their waste at their level** and the Panchayat/ Executing agency will support the efforts of these in planning and implementing this management. But for others, Bio degradable waste generated would be collected daily and be taken to the ZWM centre. The Non Bio degradable waste would also be taken to the ZWM centres where it would be disposed of as per the options stated above.
- b) **Industrial units: Industries should also be asked to manage their waste including toxic waste** at their level with the concurrence of the Gram Sabha as per the regulations of the State Pollution Control Board which would be duly supported by the Panchayat/ Executing agency.



However for non toxic waste of lesser quantity the waste collectors from the Gram Panchayat would collect the waste and remove the same to the ZWM centres for further processing. The Bio-degradable waste should be collected daily and the Non Bio degradable waste generated by these units shall be disposed of by further selling it to the Rag pickers/ Kabadiwalas. Whereas the non recyclable waste will be disposed of by resorting to the land fill options.

- c) **Small shops and Big Showrooms:** Non bio-degradable waste produced by such shops would be disposed off by daily collection and thereby taking it to ZWM centres. The recyclable waste will be disposed off by further selling it to the Rag pickers/ Kabadiwalas. Whereas the non recyclable waste will be disposed of by resorting to the land fill options.
- d) **Any person/ group carrying out other commercial activity:** In addition to the aforesaid waste generated by commercial activities other allied activities like provision of transport services and other service providers (Taxi, Horse/ Mule riding, Cattle rearing, Photostat, STD booths, Motor mechanics, Petrol Pumps etc.) would be disposed off in the similar method as stated above.
- e) **Governmental Offices:** Governmental institutions situated in these areas also produce the Non Bio degradable waste which should also be disposed in the manner as described above for the disposal of such waste.

Step-6:- Implementation of Solid and Liquid Waste management at the Panchayat level:

Under the implementation process the Panchayat will adopt the supervisory role and the nodal agency the executing role. For the purpose of effective SLW Management at the Panchayat level members of the Panchayat especially the Pradhan and Vice Pradhan would assist the nodal agency by providing legal and financial help besides help it manage the daily waste management at the Panchayat level. For implementation, the activities at the Panchayat level could be divided into:



- **Role of GramPanchayat :-** Gram Panchayat will either implement SLWM itself or will support the efforts of the nodal agency in the implementation of SLWM at the Panchayat level by performing the following;
 1. Gram Panchayat will own up the SLWM programme at the Panchayat level and with the **help of nodal agency deliver the services involved.**
 2. The SLWM, Zero Waste Management (ZWM) Programme could be propagated as **"Kachre Se Kamai"**.
 3. It will ensure that the **support of the Community, Line Departments and other Stakeholders** is available to the campaign.
 4. Gram Panchayat will also **review the progress under the SLWM** in each Gram Sabha meeting.
 5. **Govt. of H.P. has banned the use of Polythene** which should be vigorously enforced and the collected polythene should be handed over to the Public Works Department.
 6. The **need for the technology** could be addressed to by the Panchayat.
 7. In case the **Panchayat has adequate funds** cleanliness in the village could also be maintained by sweepers.
 8. For the infrastructure creation for ZWM, distribution of bins, initiating the community level Bio Gas/ Composting/ Recycle of Waste, and for carrying out IEC at the Panchayat level and employment of manpower, there will be **additional fund requirement, the same will be made available by the GP** through:
 - I. In order to carry out effective SLWM the Panchayat/ Executing agency can **generate resources under the provisions of Sec. 100 of the HP Panchatyati Raj Act** and other available resources out of the following:
 - a. **One time fee** on the Business establishments for grant of NOC.
 - b. **Sanitation Cess/ Tax** on the residential and the commercial property based upon size and:
 - i. Waste generated both by the business establishment.
 - ii. Area occupied as the business/ commercial establishment.



- iii. Income generated by the business/ commercial establishment.
 - iv. Any specific commercial activity carried out within its jurisdiction.
 - v. Income generated from the recycle of waste.
- c. Where the **residential/ commercial buildings are being used for letting** out purposes in such cases the additional fee/ cess of Rs. 50/- to 100/- per month could be charged from the landlord of the residential building and a fee/ cess of Rs. 100/- to 500/- per month for the commercial building.
- d. Similarly the **recurring expenditure** would be met out of;
1. Waste collection fee from all the Stakeholders like Industries, Hotels, Dhabas and Commercial Establishments.
 2. Income generated out of sale of compost and recycle of Non Bio degradable waste.
 3. Fee/ cess on the landlords of the tenants who have been let out property both for commercial and non commercial purposes.
 4. Property tax.
- II. Income generation scheme by the Panchayati Raj Department.
- III. For the **infrastructure creation** (construction of the ZWM shed) the Panchayat can dovetail resources at its disposal (RD schemes/ BRGF), and also seek the funding from the BLSC/ DWSM together with other Line Departments. Besides this the expenses could also be met out of SLWM funds under the TSC or from the grants received from the District administration, Fee on the large waste generators like Hotels/ Industries/ Business associations, Local administration, SADA, Forest and finances from the 13th Finance commission.



- IV. **Convergence** with Urban Development, Health (VHSC grant), Pollution Control Board, Forest, Tourism Deptt. and Local administration for the provision of funds.
 - V. **Availability of Manpower from any other source** should also be incorporated into the SLWM plan of the Panchayat.
 - VI. Utilize **funds available under NGP/ MVSSP**.
 - VII. For the **religious/ pilgrimage sites Temple committee could appoint Safai Karamcharis** for the project.
9. For implementation of the **penal provisions**, role of the Panchayat is important.
 10. For the disposal of waste the Panchayat shall arrange the **tie up of the nodal agency with the local Kabbdiwalas** for recyclable waste and for non- recyclable waste select land for land fill options with the help of Revenue and Forest departments.
 11. For ensuring the strict vigil on the defaulters, Panchayat would be required to **establish vigilance committees**.
 12. **IEC at GP level** for the SLWM would be directed by the Panchayat for creating an effective environment in the Panchayat area through Door to door visit, Brochures / Pamphlets, use of MM / YM /Local SO.
 13. The Gram Panchayat will also fix **"GRAM SAFAI DIVAS"** village sweeping day frequently for involving all the Stakeholders in SLWM.
- **Nodal Agency:** - SLWM process requiring community participation should be handled by a dedicated nodal agency which can either be VHSC or any other CBO which is locally based . This agency will be responsible for the daily administration of the waste management at the Panchayat level. The nodal agency will carry out the following activities:
 1. The agency will **employ the sanitary workers for the waste collection/ segregation and for the management of the ZWM centre**.
 2. In addition to this provision of **separate Dustbins for Bio- degradable and Non bio-degradable waste**, its collection and its transportation to the ZWM



centres and from the ZWM centres further disposal of the waste for recycle or for the composting purposes would be undertaken by the nodal agency.

3. For large communities, the nodal agency will carry out solid waste management by means of **house-to-house collection** either through some tempo or some cycle-rickshaw and will adopt the centralized method of treating the waste.
4. But in case of small communities, the nodal agency will use the decentralized treatment methods which include the treatment of waste at the place of its origin.
5. It will **carry out the detailed field survey** and assist the Panchayat in preparing the action plan besides coordinating at community/ ward/ village / street / locality level, traders / business associations for implementation.
6. The sanitary workers would also ensure that **all the household/ trade institution follow the SLWM regulations** as applied in the Panchayat.
7. Such a nodal agency will be responsible for the **conduct of regular IEC** and it will be a link between the Panchayat and the Community (Women / Men / SHGs of GP, CBOs, business and Hotel association and Volunteers). The agency will also form the Swachta Samitis at Ward and GP level.
8. The nodal agency under the supervision of Gram Panchayat will identify certain days "**GRAM SAFAI DIVAS**" village sweeping day Stakeholders under SLWM in the Panchayat.
9. The **collection of Sanitation Cess and other Fees** would be assigned to the nodal agency.

Sanitation cess/ fee in the industrial centres and the adjoining areas could be imposed as per the following examples;

Ordinary Rural Area

A fee of ₹.10/- to 30/- P.M. per family for door to door waste collection

A fee of ₹.40/- to 60/- P.M. per shop for door to door waste collection



A fee of ₹ 100/- to 200/-P.M. per govt. office for waste collection depending upon the size and no. of officials.

A fee of ₹. 200/- to 400/- P.M. per non-govt. institute/ office such as Hotel/Resort, Private Schools, Clinics etc. for waste collection

Semi Urban Area

A fee of ₹.20/- to 40/- P.M. per family for door to door waste collection.

A fee of ₹50/ to 100/- P.M. depending on size on each property let out to the tenants depending on the size.

A fee of ₹. 100/- to 200/- P.M. per shop for door to door waste collection

A fee of ₹. 100/- P.M. to 400/-per Dhaba depending on size for waste collection

A fee of ₹. 500/- to 1000/- P.M. per Hotels / Restaurants / Resorts depending on size for waste collection

A fee of ₹100/- to 200/-P.M. per govt. office for waste collection

A fee of ₹. 300/- to 500/-P.M. per non govt. institute/ offices for waste collection.

Sale of recyclable waste and Compost as per the actual

Commercial Areas

One time imposition of fee on the business establishments when these take up commercial activity, for issuance of NOC depending on its size and as decided by the Gram Sabha, A onetime fee of ₹. 5,000/- to ₹. 1,00,000/ depending upon the business establishment and its earning potential and also the quantum and type of waste generated.

A fee of ₹. 10/- to 20/-per day par Mule/Horse as Dung collection fee

A fee of ₹200/- to 300/- P.M. per shop for door to door waste collection

A fee of ₹100/- to 400/- P.M. per Dhaba depending on size for waste collection

A fee of ₹500/- to 1000/- P.M. per Hotels / Restaurants / Resorts depending on size for waste collection

A fee of ₹100/- P.M. per govt. office for waste collection

A fee of ₹300/- P.M. per non-govt institute/ office for waste collection.

Sale of recyclable waste and Compost as per the actual



A fee of ₹5000/- to 10000/-per year per industry as Pollution tax

Step7:- Construction of Community Sanitary Complexes on Priority Basis: In order to meet the sanitation related requirements of the transit population, construction of Community Sanitary Complexes (with adequate No. Of Urinals and baths) should be incorporated into proposed waste management activities of the Panchayats. This would not only be useful for sustaining the ODF Status of these Panchayats, but would also encourage the visitors to maintain safe, sanitary and hygienic atmosphere facilities within its jurisdiction. Operation and Maintenance of such complexes should be ensured either by Temple Trusts / Committees, Hotel/ Industrial associations, GPs or this could be outsourced to the some CBO/NGO for which nominal user charges should be imposed.

Step 8:- Technology options: The Gram Panchayat and the Nodal agency with the support of the BLSC/ DWSM will propagate appropriate technological options both for Household and Community level waste management. These options will take into consideration situation of the habitation/ area in conjunction with approximate cost estimates as per the prevailing situation with special focus on Reduce, Reuse and Recycle by segregating the waste into Bio/ Non-Bio degradable waste.

- **Bio degradable waste:** For the management of Bio degradable waste microbial composting method should be used. Simplest and the cheapest is composting in the pit, where the **pit is filled by appropriate layering of garbage and loose soil alternately. Above ground honeycombed brick lined tank also can be used** for composting.

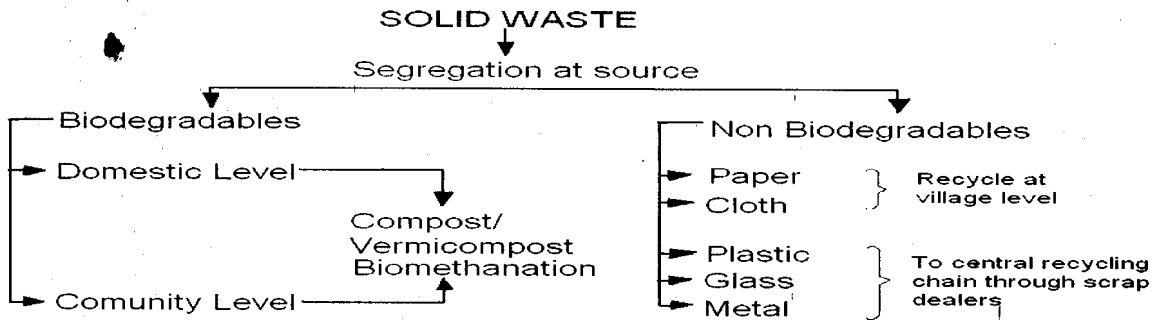
For large quantity of wet Bio degradable material, **Bio gas plant technology** can be used. **Vermi composting** can be other useful technology for managing community garbage.

- **Non-Bio degradable** waste can be managed by resorting to arrangements such as;
 - The local rag-pickers who could themselves collect the recyclable items from the Gram Panchayats.
 - Collection and Dumping of such waste at some place e.g. Sanitary Landfill.
 - Sweeping arrangements in the Panchayat premises.



- Sharing of responsibility among the community members for the management of Solid waste.
- Incineration at the community level but should be resorted to as the last option.

IDEAL SOLID WASTE MANAGEMENT



- **Liquid Waste technological options:** For the management of the liquid waste methods such as **leach Pit, Soakage Pits** and **Drainage** could be used.

**Special Secretary (RD&PR) to the
Government of Himachal Pradesh, Shimla**
