

A Model Bylaw for Solid Waste Management in Gram Panchayats

Bylaw forGram Panchayat.....Panchayat Union ofdistrict.
Approved by Gram Sabha on...../...../.....2017

PART – I

General

1. The jurisdiction of the bylaw is limited to solid waste management of the villages and hamlets within Village Panchayat.
2. These bylaws are prepared keeping in view the Solid Waste Management Rules – 2016 issued by the Ministry of Environment, Forest and Climate Change (notified in the Gazette of India on 8th April 2016).
3. These bylaws are prepared keeping in view the Constitution of India (Articles 243G, 243H, 243I, and 280) and the Guidelines of the Swachh Bharat Mission (G) for solid waste management in rural areas.
4. The Village Water and Sanitation Committee (VWSC) is hereby appointed Executive Authority to plan, collect, treat and dispose kitchen wastes, and other domestic waste generated by households, shops and other establishments within the boundaries of the Panchayat.
5. The VWSC shall put in place a proper system for solid waste management for this GP. It shall fix terms and rates under which wastes generated by residents shall be collected and disposed in a manner that is healthy, and overall cleanliness of the village shall be maintained.
6. Solid waste generated by households, shops and establishments, and marriage halls within the GP shall be handled by a team of sanitation workers trained and appointed by the VWSC with the approval of the GP on terms set out in this bylaw (and related rules to be intimated when required).
7. Differential rates will be applicable to different category of residents such as households, tea stalls, village restaurants and eateries, marriage halls, schools and offices if any, vegetable markets, mutton and chicken stalls, grocery shops etc.
8. The rates set out in this bylaw are hereby imposed on all category of waste generators in the village and the rates shall be levied and collected in accordance with a tariff fixed (See 2.5).
9. The rates shall be revised once a year to reflect changes in the cost incurred in solid waste management services
10. Revenue collected for providing solid waste management (SWM) services shall be used only for the purpose of operation and maintenance of the said services

including the workers' salary, employed additionally (or made to work for extra hours) for this purpose.

11. Any person who behaves in breach of this bylaw shall be liable to a fine as stipulated in this bylaw (See Point No.2.5).

PART – II

1. The GP shall do a survey and sort out residents under different categories (See User Category below). There will be a series of community education programmes conducted with the help of Block level staff of the government (or an NGO) involved in sanitation promotion (SBM) activities.
2. Residents, and shops etc. of the GP shall be intimated which category they fall under for the purpose of payment of service charges for SWM – preferably monthly (or as agreed upon).
3. The unit considered as house for the purpose of House Tax shall be considered as household in this case also.

2.1 User Category

- i. Households
- ii. Tea stalls
- iii. Village restaurants and eateries
- iv. Marriage halls
- v. Vegetable markets
- vi. Mutton and chicken stalls / Fish markets
- vii. Grocery shops
- viii. Schools and offices, if any
- ix. Temples, churches, mosques etc. (unless they have their own waste disposal arrangement)
- x. Others

It is at the discretion of the VWSC, that a destitute woman or aged person running a small petty shop with an investment of less than Rs.1000 (one thousand only) may be exempted from paying, provided s/he already pays as a household. This is not applicable to others such as those who run a village eatery, vegetable vending, chicken/mutton and fish stall (with no proper arrangement for disposal of wastes) etc.

2.2 Technical Stipulations

1. The Panchayat shall pass a resolution banning the use of use-and-throw carry bags, and use-and-throw tea cups and seek the cooperation of community to carry reusable cloth bags, and insist on shopkeepers to use only biodegradable alternatives, in order to help the buyers who forget to bring cloth bags.

2. Every household shall be provided with two coloured baskets – one for WET WASTE, and the other for DRY WASTE. Households will be educated on which waste goes into which bin / basket, and the intervals at which collection cart visits them. It is preferable a third basket can be given for domestic hazardous waste.
3. Primary Segregation shall take place at the source where waste is created (e.g. household level). Secondary segregation shall take place at SWM shed of the GP.
4. The responsibilities each category of SWM service users is provided separately.
5. Special arrangements shall be made for cleanliness during temple festivals and local festivals.

2.3 Inspection

1. Respective ward members of Panchayat along with the members of VWSC (or a supervisor appointed for this purpose) shall pay inspection visits to make sure that the community members, shopkeepers and others keep their surrounding clean.
2. They shall also personally visit in order to educate houses / shops that repeatedly mix up, or do not cooperate as reported by the sanitation workers.

2.4 Non-compliance

3. Where some households / shopkeepers are found not abiding by the Panchayat norms, and are chucking waste on the street corners or in some vacant place in residential areas shall be liable to pay penalty as decided by the GP.
4. In the event of a resident's persistent non-cooperation, the Panchayat may take the extreme step of cutting off other services like drinking water supply etc.

2.5 Payment for Services

The tariffs set for the SWM services with respect to different users are suggested below. However, the best way to do this is each GP can work out a budget (of likely expenditure to be incurred on SWM, and accordingly work out the service charges [rates] for each category of service users, which should serve as income to be able to meet the expenditures). The following is a suggestive tariffs for different user categories.

1. The service charges for SWM shall be payable to the sanitation worker (or sanitation supervisor) at the door steps of service users before the 5th day of every month, unless otherwise specified. This is easier to collect and easier to pay. A receipt for the amount paid shall be insisted on by the residents who pay.
2. Alternatively, the service charges may be paid at GP Office before the 5th of every month in advance.

3. Payment for SWM service under the terms and conditions laid down in the bylaw if not paid by the party concerned within the time stipulated shall be recoverable in the same manner as house tax.
4. Waste baskets given for SWM purpose shall not be put to any other use, causing SWM to suffer. In such an occurrence the amount spent on the baskets shall be recovered at double the price.
5. Household not willing to involve themselves in primary segregation can do so, provided they are prepared to pay Rs.150/pm, instead of the regular Rs.50/pm.
6. However, those found chucking waste at the streets/street corners shall be liable to pay a penalty of Rs.500 every time they err.

Sl.	User Category	Service Charge (monthly)	Remarks
1	Households	Rs.50 /Rs.150	Payable monthly (Type – A) (If a household does not want to spend time on primary segregation, they can opt to do so on additional payment of Rs.100 every month. They shall be known as Type –B.
2	Tea stalls	Rs.50	Payable monthly
3	Village restaurants and eateries	Rs.100	Payable monthly
4	Marriage halls	Rs.500	Payable after every marriage
5	Vegetable markets	Rs.50	Payable monthly
6	Mutton & chicken stalls / Fish markets	Rs.200	Rs.50 Payable weekly
7	Grocery shops	Rs.50	Payable monthly
8	Schools and offices, if any	(as decided)	Payable monthly
9	Temples, churches, mosques etc. (unless they have their own waste disposal arrangement)	(as decided)	Collected from the community along with the collection made for temple festivals / local festivals.
10	Others (such as dispensaries)		

2.6 Penalty

1. Anyone wilfully or negligently throwing waste on the street shall be considered to have violated and shall be punished with a fine of Rs.500 in the case of households and shops; and Rs.2000 in the case of marriage hall or as decided by the VWSC.
2. The GP/VWSC may also decide differential penalties in the case of one time violation, and repeated non-compliance / negligence.

3.1 Responsibilities of Households / Waste Generators

The following are responsibilities of households and others except marriage halls.

1. Each household shall segregate waste into wet waste (kitchen waste & food scraps) and dry waste (other waste) and put in the bin given specifically for each purpose. This is called primary segregation, which shall take place at the household /shopkeepers level. Those who do not want to segregate waste can do so on extra payment as prescribed by the GP. Those who repeatedly give mixed up (both dry waste and wet waste) shall be automatically classified under Type – B and charged accordingly.
2. As far as possible leftover food items such as fish bones, mutton and chicken bones may be given to pet cats / dogs, if available at the households. This is a way to deal especially with leftover food at household level. Otherwise, they may be securely wrapped in a newspaper and handed to the sanitation workers (preferably with a green X [cross mark] on it). It helps easy identification of what is inside.
3. Vegetables peels, fruit peels, egg shells, used tea leaves, leftover cooked vegetables on the plate may be put in wet waste bin. But never knot it.
4. It is always good to wash inside of a milk packet with water. That way, the milk in frozen form may find its way to your milk pan. Washed milk cover renders it easy for the sanitation workers to deal with it, as it does not smell. Moreover, just in case an unwashed milk cover ends up on the street, it happens that calves [small ones of a cow] tend to eat up the cover because of the milk smell, which over the years becomes dangerous for the animal.
5. Certain items such as used sanitary pads, children's nappies, and condoms shall be securely wrapped in newspapers, or some papers available (put a red X [cross mark]) before it is handed to the sanitation workers, who shall take them to sanitary pad incinerator or bury in a landfill. Marking helps easy identification so that the sanitation worker shall not open it. It is good to use a third basket (Red colour or Black colour) to discard such items. This is part of hazardous waste generated as household level.
6. Putting kitchen waste (vegetable peels etc.) in carry bags and knotting it should be avoided. Use torn newspapers / dry leaves at the bottom of Green basket, so as to avoid these things getting stuck, instead of using use-and-throw carry bags.

7. The sanitation workers (in uniform & cap) shall visit every household with a cart / tri-cycle, and ring a bell to let the households / shops in that area get to know that the waste collection vehicle has arrived. It is the responsibility of each household to give the two baskets to the sanitation workers, who shall empty each basket in separate containers they bring / in partitioned vehicles.
8. No waste generator shall throw, burn or bury the solid waste generated by him, on streets, open public spaces outside his premises or in the drain or water bodies.
9. All waste generators shall pay such user fee for solid waste management, as specified in the by-laws of the local bodies.
10. No person shall organise an event or gathering of more than one hundred persons at any unlicensed place without intimating the local body, at least three working days in advance and such person or the organiser of such event shall ensure segregation of waste at source and handing over of segregated waste to waste collector or agency as specified by the Gram Panchayat.
11. Every street vendor and eateries etc. shall keep suitable containers for storage of waste generated during the course of his activity such as food waste, disposable plates, cups, cans, wrappers, coconut shells, leftover food, vegetables, fruits, etc., and shall deposit such waste at waste storage depot or container or vehicle as notified by the Gram Panchayat.
12. All resident welfare and market associations shall, within one month from the date of notification of these rules and in partnership with the local body ensure segregation of waste at source by the generators as prescribed in these rules, facilitate collection of segregated waste in separate streams, handover recyclable material to the waste collection arrangement made by the GP or to some authorised recyclers or waste pickers.
- 13.
14. The complaints, if any, from the residents may be written in the complaints book available in the waste collection vehicle. The residents may also call up the mobile number available in the cash receipt that they received the previous month.
15. Similarly, the sanitation workers shall also keep note of households / shopkeepers who do not cooperate (not abide by the bylaw) and report to the GP/VWSC.

3.2 Responsibilities of Sanitation Workers

1. The sanitation workers shall collect waste primarily segregated at the household level, and after reaching the segregation shed allotted, shall involve in secondary segregation, where they segregate (different types of) recyclable items from the items that must go for composting etc.
2. Households making direct payment of service charges at Panchayat Office is to be promoted as a system. Where some shopkeepers feel uncomfortable, the sanitation

workers shall collect service charges from such households and give account to the Panchayat Secretary to keep accounts, and follow up those who have not paid.

3.3 Responsibilities of VWSC / Gram Panchayat

1. Arrange for door to door collection of segregated solid waste from all households including slums and informal settlements, commercial, institutional and other non-residential premises and ensuring hygienic conditions.
2. Collect separately waste from sweeping of streets, lanes and by-lanes daily, or on alternate days or twice a week depending on the density of population, commercial activity and local situation;
3. Transport segregated bio-degradable waste to the processing facilities like compost plant, bio-methanation plant or any such facility. Preference shall be given for on-site processing (home-based) of such waste;
4. Direct and educate the waste generators not to litter i.e throw or dispose of any waste and to segregate the waste at source as prescribed under these rules and hand over the segregated waste to authorised the waste pickers or waste collectors authorised by the local body
5. Arrange for composting of wet waste (type of composting as determined early on).
6. Setup material recovery facilities or secondary storage facilities with sufficient space for sorting of recyclable materials to enable informal or authorised waste pickers and waste collectors to separate recyclables from the waste and provide easy access to waste pickers and recyclers for collection of segregated recyclable waste such as paper, plastic, metal, glass, textile from the source of generation or from material recovery facilities.
7. Arrange segregation and sale of recyclable wastes.
8. Identify waste deposition centres for domestic hazardous waste and give direction for waste generators to deposit domestic hazardous wastes at this centre for its safe disposal.
9. Provide training on solid waste management to waste-pickers and waste collectors;
10. Involve communities in waste management and promotion of home composting, bio-gas generation, decentralised processing of waste at community level subject to control of odour and maintenance of hygienic conditions around the facility;
11. Phase out the use of chemical fertilizer in two years and use compost in all parks, gardens maintained by the local body and wherever possible in other places under its jurisdiction.
12. Make sure hardly 10 – 15% ends up in a sanitary landfill. And it should not be considered as a place for dumping. It should be a sanitary landfill.
13. Make sure the village streets, street corners, and vacant places are clean. And everyone cooperates to maintain cleanliness. Frequently inspect vulnerable spots.

14. Facilitate construction, operation and maintenance of solid waste processing facilities and associated infrastructure on their own or with private sector participation or through any agency for optimum utilisation of various components of solid waste adopting suitable technology.
15. Prescribe from time to time user fee as deemed appropriate and collect the fee from the waste generators on its own or through authorised agency
16. Promptly attend to community grievances so that their cooperation can be counted on.
17. Sustain the work, and make it a regular habit among the residents not to litter in open places / in drainage canals etc.
18. educate workers including contract workers and supervisors for door to door collection of segregated waste and transporting the unmixed waste during primary and secondary transportation to processing or disposal facility;
19. Provide personal protection equipment including uniform, fluorescent jacket, hand gloves, raincoats, appropriate foot wear and masks to all workers handling solid waste and the same are used by the workforce
20. Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities

21. levying of spot fine for persons who litters or fails to comply with the provisions of these rules and delegate powers to VWSC to levy spot fines as per the bye laws; and create public awareness through information, education and communication (IEC) campaign and educate the waste generators on the following; namely:-
 - not to litter;
 - minimise generation of waste;
 - reuse the waste to the extent possible;
 - practice segregation of waste into bio–degradable, non-biodegradable (recyclable and combustible), sanitary waste and domestic hazardous wastes at source;
 - practice home composting, vermi-composting, bio-gas generation or community level composting;

What to include in a Waste Survey?

- i. Source of waste (Households, restaurants, marketplaces, streets etc.)
- ii. Types of waste generated
- iii. Amount of waste generated type-wise (Wet / Dry and Hazardous etc.)
- iv. Identify vulnerable spots/ infamous spots – dumping sites
- v. Existing disposal practice – at household level, and at marketplaces
- vi. How do institutions like schools, ICDS, local clinics dispose waste?
- vii. What is the capacity of the GP to implement an SWM plan
- viii. What does it take to build the capacity of the GP to manage an SWM unit?

Report from Waste Survey

Break-up details of Waste Generated in Gram Panchayat

S.no	Name of the area	Waste generated per day inGP				Total (kgs)
		Wet waste (kgs)	Dry waste (kgs)	Hazardous waste (kgs)	Road sweeping waste (kgs)	
1	Ward - 1					
2	Ward - 2					
3	Ward – n					
4	Main Streets					
5	Market area					
6	School / ICDS					
7	Ration shop					
8	Temple / church / mosque area					
9	Tea stalls / Restaurants					
10	Marriage halls, if					
Total						

- Total Waste Generated per day
- Average amount of waste by each household
- Average amount of waste generated by other residents / shops & establishments / shandy
- Understand the existing waste disposal system
- Identify vulnerable / infamous spots
- Nature of the community (in response to previous efforts of similar nature)
- What kind of a plan is required at the GP level to take up SWM project
- Who should we involve in terms of support institutions, and implementation partners?

Preparation of a Detailed Project Report

A detailed plan is essential to have mental dry-run of the project. It helps to estimate the (i) manpower, (ii) equipment, (iii) technological, and (iv) financial requirements. An outline of a DPR (Detailed Project Report) is presented below. This can help GPs to prepare a plan of their own.

- Name of the GP.....Block:.....District.....
- Population:
- Households:
- Number of Wards or Streets or Hamlet: (provide anyone)
- Ward-wise/street-wise Households / habitation: (use the following format to present the data)

Sl.	Name of the Habitation / Hamlet	No. of Households	No. of shops & other establishments	Approx. Volume of solid waste generated
1				
2				
3				
4.				

- List the waste generators (households, shops, tea stalls, market area, school etc.)
- What type of wastes are generated (Aprox. How much wet – dry – hazardous?)
- What is the present arrangement for waste management?
- Do a transect walk, and identify also the vulnerable spots & those currently being used by the households and shopkeepers to dump waste.

PROPOSAL

- Describe what is proposed (provide a diagram how you are planning to manage waste?)
- What facilities are required? Land, Infrastructure etc.
- What equipments are required? Justification for each equipment (e.g. Tri-cycle)
- How do you plan to prepare the community / Households?
- How do you plan to equip the GP (Institution) to take up this new task (SWM)
- Mechanism of Operation (Technical Plan)
 - Additional Manpower Requirement

- Collection Arrangement,
- Transport
- Treatment
- Disposal
- Financial Plan
 - Fixed (One-time) Investment Requirement (List the requirements with budget)
 - How much does the monthly Operation Expenditure comes to
- **Budget**

Sl.	Items of Expenditure (monthly)	Rs.	Items of Income (Monthly)	Rs.
1				
2				
3				
4				

What is the Financial Assistance Requested?

Other Requirements:

A Note on the Land where the facilities are to be set up (supporting papers):

What is the plan for sustainable Operation & Maintenance of the Project?