



PREPARING FOR EMERGENCY COVID RESPONSE

CONSIDERATIONS FOR BUDGET
PREPARATION FOR URBAN SANITATION

Waste management is an essential public service in response to combat with the novel coronavirus disease (COVID-19). The pandemic is continuing to spread and its impacts upon human health and the economy intensifying day-by-day, Urban Local Bodies (ULBs) are urged to treat and manage the waste, including of medical, household and other hazardous waste, as an urgent and essential public service in order to minimise possible secondary impacts upon health and the environment. Ensuring safe water supply, solid waste management, safe sanitation and hygiene practices in communities, residentials, schools, marketplaces, and health care facilities are important. When it comes to risking their lives for the protection of others, in the present times, sanitation workers are at par with doctors, healthcare workers and policemen. Sanitation workers- 'SafaiYodhas' are standing in front line of the battle against this global pandemic and we need to support them with all means including protective gear, to fight this crisis.

This section provides guidance to State governments and Urban Local Bodies and any other agency working for sanitation workers safety, for developing proposals for funding for protective gear and materials for addressing COVID 19 risk. However, any proposal must conform to the Government of India and relevant State Government Advisories, hence it is important to read this section together with Part-A of this Resource Book.

Following Steps may be undertaken at the Town Level:

1. Prepare a Sanitation Workers Safety Risk Matrix

Some typical sanitation work and the risks involved is tabled below so that the ULBs and agencies identify, purchase and utilise the proactive gears in a best possible manner. An initial assessment of sanitation workers activities, hazardous events and associated severity of risk are identified arbitrary by many journals. Any more activities that are state and ULB specific, may be added or removed from this list.

Sanitation Activity	Possible Hazardous Events	Severity of the Risks Involved
Sanitary workers in hospital/ Quarantine centers	Coming in direct contact with infected patient's refuse, contaminated surfaces and infectious bio medical waste.	Very high risk
Door to Door(D2D) waste collection	Coming in contact with infected person/waste	Moderate Risk
Street sweeping	Exposure to surfaces infected through respiratory droplets	Low risk to moderate risk
Sewer and drain cleaning and Desludging of septic tanks	Coming in direct contact with excreta from infected person	Moderate risk
Community/Public Toilets cleaners/caretaker	Coming in contact with surfaces infected through respiratory droplets	Moderate to High risk
STP/ FSTP operator	Coming in contact with wastewater carrying virus especially at screens unit and grit chambers	Moderate risk

2. Checklist of Priority Tasks and Actions

Planning at state level should factor in the following priorities:

Priority Tasks and Actions		
1	<input type="checkbox"/>	Initiate State and ULB level Task Forces to coordinate work; Activate multi-sectoral, multi-partner coordination mechanisms to support preparedness and response
2	<input type="checkbox"/>	Take a stock of all permanent and contractual sanitation workers employed for Solid Waste Management (including hotspots, Hospitals and Quarantined homes), landfills, Street sweeping, sewer and drains cleaning, cleaning at market yards, haats/mandis, parks and common places, STPs and FSTPs. Identify who may need financial support if laid off by private contractors.
3	<input type="checkbox"/>	Issue Passes for sanitation workers to move across sealed boundaries and defy curfew in residential areas
4	<input type="checkbox"/>	Disseminate collaterals through What's App, for simple yet clear understanding of the COVID-19 pathogen spread and its risk and immediate safety steps to be followed by all sanitation workers
5	<input type="checkbox"/>	Prepare a list of sanitation worker's safety gears requirement. Discuss with Anganwadis, Schools, self-help groups and Health Departments, to prioritize procurement items for a given duration of requirement(3 to 6 months).
6	<input type="checkbox"/>	Plan Sanitation work in order to minimize risk of infection 1. Teams that serve areas of a town or Colonies, that are NOT declared HOTSPOTS. 2. Teams that do routine cleaning work in public areas such as parks, streets, markets and commercial areas. 3. Teams engaged in direct contact with HOTSPOTS: Collection and treatment of waste under BMW rules, QuarantinedHomes/Hospitals/Centers

3. Preparing a budget

The time of COVID-19 pandemic is a time when the demand for protective gear has skyrocketed and the supplies have dwindled.

- Prioritize the categories of workers who require protective gear and also category wise required protective gear.
- The Government of India and various state governments have detailed out the **Essential protective gear** and this needs to be factored in the budget making process.
- Some Civil Society Organisations who possess expertise in the area of sanitation have also drafted documents highlighting the need for protective gear for sanitation workers, FSTP operators, operators of community and public toilets and other categories of workers. The protective gear specified in these documents and not found in government advisories have been considered as Desirable protective gear. Providing **Desirable protective gear** may be considered optional, if funds do not permit.

Considerations for Sanitation Workers Protective Gear and Sanitization materials:

- Protective gear must be disinfected, washed and sun dried as per guidelines issued by Govt from time to time.
- Based on the current circumstances and to ensure uninterrupted service, the items can be procured for next few months phase wise.
- For disinfection purpose Sodium Hypochlorite solution (1%) can be considered or any other material designated by the national/state govt.
- For temporary storage of Bio Medical Waste (BMW) yellow colored garbage bags can be considered.
- Mandatory orientation of Sanitation Workers and Waste pickers on COVID-19, Social Distancing norms and

key precautionary measures to be taken including frequent hand-washing, avoid touching their face and wearing Protective gears.

- List of Do's and Dont's to be practiced while performing their duties and extending necessary support to them.
- For transportation of BMW to Common Biomedical Waste Treatment Facility, Light Commercial Vehicles can be considered which can be easily maneuvered through narrow roads.

4. Budget Templates for estimating cost for protective gear and essential items

For the benefit of ULBS, NIUA has come up with a DIY Budget Template toolkit for the purpose of estimating the budget for procuring protective gear and other essential items during COVID-19 pandemic. When the required data is entered in the toolkit, the budget estimate is calculated and presented the last table. The toolkit along with the calculation can also be printed. The excel based toolkit can be downloaded here <https://drive.google.com/file/d/1TGxDSreE07t4LA3l17crQzLWFA02OhhT/view?usp=sharing>. The process in the toolkit is explained below. And budget calculation for a sample town is provided in Annexure I.

Step 1 Fill the following details

Date	
Name of the ULB	
Name of the State	
Name of Contact person	
Designation	
Email ID	
Contact no.	
Current Population of the ULB	
No. of months for which Budget is to be estimated(n)	

Step 2 Kindly enter the breakup of no. of Sanitary Workers/Allied workers in each category(ignore if the particular category is not applicable for your ULB)

S. No.	Category	Estimated number of sanitary workers/allied workers requiring protective gear	Protective Gear requirement as per Gol advisories and guidelines	Relevant government guideline/ advisory
1	Sanitary workers involved in handling and collection of waste from houses of people under self-quarantine		Triple layer masks, Aprons, Nitrile gloves, Gum boots and Safety goggles	Guidelines for waste disposed from quarantine facilities, CPCB, MoEFCC and Advisory for Health and Safety of Sanitation Workers during COVID-19 by MoSJE
2	Sanitary Workers involved in Cleaning of CTs and PTs		Triple layer masks, Aprons, Gum boots and Nitrile gloves	Guidelines on disinfection of common public places including offices by MoHFW and Advisory for Health and Safety of Sanitation Workers during COVID-19 by MoSJE
3	Sanitary workers collecting waste from regular households		Triple layer masks, Aprons, Gum boots and Nitrile gloves	Additional advisory for maintaining cleanliness during lockdown period by MoHUA and Advisory for Health and Safety of Sanitation Workers during COVID-19 by MoSJE
4	Street sweepers and drain cleaners		Triple layer masks, Aprons, Gum boots and Nitrile gloves	Guidelines on disinfection of common public places including offices by MoHFW and Advisory for Health and Safety of Sanitation Workers during COVID-19 by MoSJE
5	Desludging operators		Triple layer masks, Nitrile Gloves , Aprons , Gum boots	Advisory on safe management of water supply and sanitation services during COVID-19 crisis by MoHUA
6	Workers employed at STP/FSTP		Triple layer masks, Nitrile Gloves , Aprons , Gum boots, Safety goggles	Advisory on safe management of water supply and sanitation services during COVID-19 crisis by MoHUA
7	Sanitary workers in COVID-19 Hospitals and all other Healthcare		N95 Mask, Nitrile gloves	Guidelines for rational use of PPE by MoHFW
8	Sanitary workers involved in cleaning quarantine centres		Triple layer masks, Nitrile gloves	Guidelines for rational use of PPE by MoHFW
9	Workers at Common Biomedical Waste Treatment Facility(CBWTF)		Triple layer masks, Aprons, Nitrile gloves, Gum boots and Safety goggles	Guidelines for waste disposed from quarantine facilities, CPCB, MoEFCC
	Total no. of Sanitary and allied workers to be given we protective gear			

Step 3 Kindly enter the specification, quantity requirement(in per person per month) and rates of the protective gear mentioned below as per their market/manufacturer available.

S. No.	List of consumables	Enter the specifications	Enter the required number of pieces/pairs per person per month *	Rate in Rs/item **
1	N95 face mask			
2	Triple layer masks			
3	Chemical resistant Nitrile gloves			

S. No.	List of non-consumables	Enter the specifications	Enter the required number of pieces/pairs per person per month *	Rate in Rs/item **
1	Gum boots			
2	Safety Goggles			
3	Aprons			

*For eg. for mask you can go for single use surgical mask (30 masks required in 30 days) or multiple use N95 mask (one mask for 30 days). **Rates can be found here on GEM portal <https://gem.gov.in/> . For certified PPE manufacturers visit <http://texmin.nic.in/covid/certificates.php> .

Step 4 Enter the numbers/quantity along with rates of other essential items required.
If something is left out, kindly add them along with their required quantities and rates.
Kindly leave the cell empty, if not applicable.

S. No.	List of consumables	Enter the quantity required per month	Rate in Rs. *	Amount in Rs.
1	Yellow garbage bags for infectious waste storage			
2	Disinfectant (Sodium Hypochlorite solution 1l)			
3	Bleaching powder (1kg)			
4	Anything else			
5	Anything else			
		Total		

S. No.	List of non-consumables	Enter the quantity required	Rate in Rs. *	Amount in Rs.
1	Light Commercial Vehicle for transporting Biomedical waste			
2	Handwashing units			
3	Digital Contactless Infrared			
4	Anything else			
5	Anything else			
		Total		

*Rates can be found here on GEM portal <https://gem.gov.in/>

Total Budget

S. No.	Budget estimation	Rate in Rs. lakhs
1	For Essential protective gear alone for the given number of months	
2	For Essential protective gear and essential items for the given number of months	
3	For Essential protective gear alone for 1 year	
4	For Essential protective gear and essential items for 1 year	

Annexure I

Step 1 Fill the following details

Date	29/05/2020
Name of the ULB	Devprayag Nagar Palika
Name of the State	Uttarakhand
Name of Contact person	Ms. X
Designation	Chairperson
Email ID	X@gmail.com
Contact no.	(+91)
Current Population of the ULB	5000
No. of months for which Budget is to be estimated(n)	6

Step 2 Kindly enter the breakup of no. of Sanitary Workers/Allied workers in each category(ignore if the particular category is not applicable for your ULB)

S. No.	Category	Estimated number of sanitary workers/ allied workers requiring protective gear	Protective Gear requirement as per GoI advisories and guidelines	Relevant government guideline/ advisory
1	Sanitary workers involved in handling and collection of waste from houses of people under self quarantine	20	Triple layer masks, Aprons, Nitrile gloves, Gum boots and Safety goggles	Guidelines for waste disposed from quarantine facilities, CPCB, MoEFCC and Advisory for Health and Safety of Sanitation Workers during COVID-19 by MoSJE
2	Sanitary Workers involved in Cleaning of CTs and PTs	10	Triple layer masks, Aprons, Gum boots and Nitrile gloves	Guidelines on disinfection of common public places including offices by MoHFW and Advisory for Health and Safety of Sanitation Workers during COVID-19 by MoSJE
3	Sanitary workers collecting waste from regular households	50	Triple layer masks, Aprons, Gum boots and Nitrile gloves	Additional advisory for maintaining cleanliness during lockdown period by MoHUA and Advisory for Health and Safety of Sanitation Workers during COVID-19 by MoSJE
4	Street sweepers and drain cleaners	20	Triple layer masks, Aprons, Gum boots and Nitrile gloves	Guidelines on disinfection of common public places including offices by MoHFW and Advisory for Health and Safety of Sanitation Workers during COVID-19 by MoSJE
5	Desludging operators	2	Triple layer masks, Nitrile Gloves , Aprons, Gum boots	Advisory on safe management of water supply and sanitation services during COVID-19 crisis by MoHUA
6	Workers employed at STP/FSTP	4	Triple layer masks, Nitrile Gloves , Aprons, Gum boots, Safety goggles	Advisory on safe management of water supply and sanitation services during COVID-19 crisis by MoHUA
7	Sanitary workers in COVID-19 Hospitals and all other Healthcare	10	N95 Mask, Nitrile gloves	Guidelines for rational use of PPE by MoHFW

S. No.	Category	Estimated number of sanitary workers/ allied workers requiring protective gear	Protective Gear requirement as per GoI advisories and guidelines	Relevant government guideline/ advisory
8	Sanitary workers involved in cleaning quarantine centres	5	Triple layer masks, Nitrile gloves	Guidelines for rational use of PPE by MoHFW
9	Workers at Common Biomedical Waste Treatment Facility(CBWTF)	0	Triple layer masks, Aprons, Nitrile gloves, Gum boots and Safety goggles	Guidelines for waste disposed from quarantine facilities, CPCB, MoEFCC
	Total no. of Sanitary and allied workers to be given we protective gear	121		

Step 3 Kindly enter the specification, quantity requirement(in per person per month) and rates of the protective gear mentioned below as per their market/manufacturer available.

S. No.	List of consumables	Enter the specifications	Enter the required number of pieces/pairs per person per month *	Rate in Rs/item **
1	N95 face mask		5	130
2	Triple layer masks		5	30
3	Chemical resistant Nitrile gloves		3	50

S. No.	List of non-consumables	Enter the specifications	Enter the required number of pieces/pairs per person per month *	Rate in Rs/item **
1	Gum boots		1	300
2	Safety Goggles		1	80
3	Aprons		3	150

*For eg. for mask you can go for single use surgical mask (30 masks required in 30 days) or multiple use N95 mask (one mask for 30 days). **Rates can be found here on GEM portal <https://gem.gov.in/> . For certified PPE manufacturers visit <http://texmin.nic.in/covid/certificates.php> .

Step 4 Enter the numbers/quantity along with rates of other essential items required.
If something is left out, kindly add them along with their required quantities and rates.
Kindly leave the cell empty, if not applicable.

S. No.	List of consumables	Enter the quantity required per month	Rate in Rs. *	Amount in Rs.
1	Yellow garbage bags for infectious waste storage	500	2	1000
2	Disinfectant (Sodium Hypochlorite solution 1l)	50	50	2500
3	Bleaching powder (1kg)	50	50	2500
4	Anything else			0
5	Anything else			0
		Total		6000

S. No.	List of non-consumables	Enter the quantity required	Rate in Rs. *	Amount in Rs.
1	Light Commercial Vehicle for transporting Biomedical waste			0
2	Handwashing units			0
3	Digital Contactless Infrared	10	3000	30000
4	Anything else			0
5	Anything else			0
		Total		30000

*Rates can be found here on GEM portal <https://gem.gov.in/>

Total Budget

S. No.	Budget estimation	Rate in Rs. lakhs
1	For Essential protective gear alone for the given number of months	2.98
2	For Essential protective gear and essential items for the given number of months	3.64
3	For Essential protective gear alone for 1 year	5.45
4	For Essential protective gear and essential items for 1 year	6.47

The total amount required for procuring the protective gears is 6.47 lakhs.

Annexure II

List of Vendors for Protective Gear

SR. NO.	NAME OF COMPANY	LOCAL/ INTERNATIONAL	ADDRESS	CONTACT DETAILS	
				CONTACT NUMBER	EMAIL
1	Cabson Enterprises	Dealer of 3M, HONEYWELL, JCB, TIGER & WORKTOES and has manufactured the PPEs with S1 and SPARTAN brands (Local)	5-1-526, Hill Street, Ganji Complex 2nd Floor, Ranigunj, Secunderabad : 500 003	040-6453 9461, 09949601427	sarah.enterprises@rediffmail.com
2	Karam	Indian Manufacturer	T-19 Towers, Block 2, Unit 901, 9th Floor, Karbala Maidan, Besides Ranigunj Bus Depot, Ranigunj, Secunderabad- 500 003 Telangana	040-27807675, 09985953535	karam@karam.in
			5-5-51/1, 2nd Floor, SL Complex, Ranigunj, Secunderabad- 500003 Hyderabad, Telangana 500003 India	096033 05355, 097000 00708	
3	Unique Industrials	Indian Manufacturer / Local	5-1-570, Hill Street, Rani Gunj, Hyderabad-500003, Telangana (India)	8037304413	
4	Mallcom	Indian Manufacturer	EN-12, Sector-V, Salt Lake Kolkata 700 091	033-40161000	sales@mallcom.in
5	Udyogi	Indian Manufacturer	294, B.B.Ganguly Street, 2nd Floor, Kolkata-700 012	033-2225-1470 033-2225-1471 033 2225-1472	info@udyogi.net
6	Safewell	Indian Manufacturer / Local	BP-7, Suit No. 504, 5th Floor, Ecostation, Sec-V, Salt Lake City, Kolkata – 700091, India.	033-23674444	kolkata@acmesafety.in hyderabad@acmesafety.in
7	Venus Safety and Health Pvt. Ltd.	Indian Manufacturer / Local	L75/76, Tondre village, MIDC, Taloja, Maharashtra, 410208.	022-27410018	info@venusohs.com
8	3M India Ltd	International Manufacturer - India Office			
9	DuPont India Pvt Ltd.	International Manufacturer - India Office	ICICI Knowledge Park, Genome Valley, Survey No.542/2, DS -9 Turkapally(Village), Shameerpet (Mandal), Ranga Reddy(District), Hyderabad-500078 (Andhra Pradesh)	040-66247000	
10	Honeywell Safety India	International Manufacturer - India Office	5th Floor, Unitech Trade Center, Sector 43, Block-C, Sushant Lok, Phase-1, Gurgaon 122002, Haryana	0124-4975000	hsp-india@honeywell.com

11	Jayco Safety Products Pvt. Ltd.	Indian Manufacturer / Local	125, Neha Industrial Estate, Dattapada Cross Road, Near Su Swagat Restaurant, Borivali(East), Mumbai - 400066.	022-49791200	info@jaycosafety.com
			82/84, 2nd Floor, Above Satkar Hotel, Masjid Bunder, Mumbai - 400 003.	022-23456395	mumbai@jaycosafety.com
12	Uviraj Global Private Limited	Indian Manufacturer / Local	S 17-18, Panki Industrial Area, Site-IV, Kanpur, Uttar Pradesh, 208022	0512-2690031, 0032	sales@uviraj.com, support@uviraj.com, enquiry@uviraj.com
13	Neo Safety Products Pvt. Ltd.	Indian Manufacturer / Local	23, N.S. Road, 6 Commercial Building 1st Floor, Kolkata - 700 001, India.	09836582791, 033-22421664	sales@neosafety.in
14	Sairam Safety Engineers	Local Dealer	Safety House, Plot no 55, Malany Colony, New Bowenpally Road, Secunderabad, Telangana	040-42300068	info@subhamsafety.com
15	Hi-Tech Surgical Company	Local Dealer	A-37, DSII DC, Engineering Complex, Mangolpuri Industrial Area, Phase 1, Delhi 110083	9891116766	sales@htscindia.com
16	Alko Plus Technosafe Pvt. Ltd.	Indian Manufacturer / Local	Plot No. 69 - 70, Sector 17, HSIIDC Industrial Estate, Bahadurgarh, Haryana - 124507	9811000742	info@alkoplus.com
17	Unicare Emergency Equipments Pvt. Ltd.	Indian Manufacturer / Local	Leslico House, 2nd Floor, Prof. V. S. Agashe Road, Dadar (W), Mumbai- 400028 (India)	022-2422 7198 / 1878 /1880	mumbai@unicaremail.com

Source: Saniverse and others

Notes:



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