



पेयजल एवं स्वच्छता विभाग  
जल शक्ति मंत्रालय  
भारत सरकार  
DEPARTMENT OF DRINKING WATER AND SANITATION  
MINISTRY OF JAL SHAKTI  
GOVERNMENT OF INDIA



# Standard Operating Procedure Safety and Dignity of Sanitation Workers in Rural India

## Occupational Safety



In keeping with the advancements in this sector, updates as and when found necessary will be hosted on the Ministry website: [www.jalshakti.gov.in](http://www.jalshakti.gov.in) and the reader is advised to refer to these also.

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एक कदम स्वच्छता की ओर

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## Occupational Safety







# Preface

The sanitation workers of rural India perform some of the most essential yet challenging duties in our communities. Their daily work ensures cleaning surroundings, thereby preventing disease outbreaks, and safeguarding public health. However, the occupational risks they face and the social stigma they endure have long remained under-addressed. The Department of Drinking Water and Sanitation (DDWS), under the Ministry of Jal Shakti, is committed to changing that.

In line with the vision of Hon'ble Prime Minister Shri Narendra Modi, who launched the Swachh Bharat Mission as a people's movement in 2014, this Standard Operating Procedure (SOP) has been developed to promote the safety, dignity, and empowerment of sanitation workers in rural areas.

This SoP provides clear, implementable guidance on personal protective equipment (PPE), job-specific safety protocols, training frameworks, and institutional responsibilities from the State to the Gram Panchayat level. It also emphasizes the need for gender-appropriate equipment, safe working conditions, and recognition mechanisms that value the contribution of every sanitation worker.

DDWS views sanitation not merely as a service, but as a national value that is integral to human dignity, community pride, and inclusive growth. Sanitation work must be seen not as invisible labour, but as foundational to development. With this intent, the SOP has been crafted to ensure that the people who enable Swachhata are themselves protected, respected, and equipped to thrive.

As we move towards building a Viksit Bharat by 2047, the inclusion and well-being of sanitation workers must remain central to our development goals. A truly developed nation is one where the most marginalized are protected, empowered, and given their due respect. The Department is committed to enabling this transformation through policy, practice, and partnership.

We urge all States and Union Territories to adopt and adapt this SOP proactively. Let this become not just a technical document, but a collective commitment to ensure that sanitation work is safe, secure, and dignified for every worker, in every village, across the country.

**Department of Drinking Water and Sanitation**  
**Ministry of Jal Shakti**  
**Government of India**



# About this SOP

Sanitation work in India is a profession that faces significant challenges, often linked to caste-based inequalities and a lack of adequate support and recognition. Despite contributing significantly to public health, safety, and environmental sustainability, sanitation workers endure widespread social stigma, low wages, and poor living conditions.

In rural areas, where most households rely on onsite sanitation systems, tasks like regular pit or septic tank emptying are essential. Workers, predominantly from marginalized communities, perform these hazardous and physically demanding duties, often enduring social stigma and exploitation. The Standard Operating Procedure (SOP) for Safety and Dignity of Sanitation Workers in Rural India is designed to address these issues. It provides a clear guideline for strengthening safety measures, enhancing training Programmes, improving infrastructure, and fostering social and economic empowerment. By clearly defining the roles and responsibilities of government officials at various levels, the SOP aims to strengthen the enforcement mechanism.

Recognizing that workplace safety and socio-economic security are interdependent, the SOP addresses both aspects to create a sustainable and dignified working environment for sanitation workers.





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OFFICE OF THE DISTRICT MAGISTRATE (CENTRAL)  
14, DARYA GANJ, NEW DELHI-110002



Ministry of Health and Family Welfare  
Government of India



To protect yourself and your loved ones/ co-workers,

Follow the  
**FIVE**

COVID Appropriate  
Behaviours even after  
vaccination



Wash hands with soap  
and water frequently and  
thoroughly or use hand sanitizer



Maintain 6 feet (2 m)  
physical distance



If you see any symptom,  
promptly get yourself  
tested

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PHILK  
ENTRY

Waste  
Chamber





# List of Abbreviations

APY	-	Atal Pension Yojana
ASTM	-	American Society for Testing and Materials
BIS	-	Bureau of Indian Standards
CHCs	-	Community Health Center
CSW	-	Core Sanitation Worker
DAY-NRLM	-	Deendayal Antyodaya Yojana-National Rural Livelihoods Mission
DDO	-	Drawing and Disbursing Officer
DLP	-	Defect Liability Period
DRDA	-	District Rural Development Agency
EN	-	European Norms
FGDs	-	Focus Group Discussions
GeM	-	Government e-Marketplace
GP	-	Gram Panchayat
H&UD	-	Housing and Urban Development
IEC	-	Information, Education, and Communication
ICDS	-	Integrated Child Development Services
ISO	-	International Organization for Standardization
KIIs	-	Key Informant Interviews
LIC	-	Life Insurance Corporation
MOHUA	-	Ministry of Housing and Urban Affairs
NAMASTE	-	National Action for Mechanized Sanitation Ecosystem
NHM	-	National Health Mission
NUHM	-	National Urban Health Mission

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NSKFDC	-	National Safai Karamcharis Finance & Development Corporation
PPE	-	Personal Protective Equipment
PHC	-	Primary Health Center
PMEGP	-	Prime Ministers Employment Generation Programme
PSSO	-	Private Sector Service Operator
PEMSR Act	-	The Prohibition of Employment as Manual Scavengers and Their Rehabilitation Act, 2013
SOP	-	Standard Operating Procedure
RSETI	-	Rural Self-Employment Training Institute
RFP	-	Request for Proposal
SCGJ	-	Skill Council for Green Jobs
SBM	-	Swachh Bharat Mission
SIRD	-	State Institute of Rural Development
SECC	-	Socio-Economic Caste Census
UNICEF	-	United Nations Children's Fund
UMC	-	Urban Management Centre

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# Background



Sanitation work in India is a profession that faces significant challenges, often linked to caste-based inequalities and a lack of adequate support and recognition. Despite contributing significantly to public health, safety, and environmental sustainability, sanitation workers face:

**Social Challenges:** They face widespread stigma, low wages, and poor living conditions.

**Health & Safety Risks:** Exposure to toxic gases, faecal sludge, and unsafe environments leads to high health risks and fatalities.

**Informal Employment:** Many workers operate without social, financial, or occupational safety nets.

Workers continue to face significant risks and fatalities due to inadequate safety measures and societal neglect. Safeguarding the lives and dignity of sanitation workers requires stringent safety measures, proper training, and protective policies, while recognizing their diverse roles is essential for effective implementation and protection.

The sanitation workers mentioned in this Standard Operating Procedure (SOP) refer to all the workers involved in solid and liquid waste management, including but not limited to:



### **Sweepers and 'Door to door' waste collectors**

Sweepers are sanitation workers responsible for cleaning streets and public spaces, while 'door-to-door' waste collectors collect household waste directly from residences for proper disposal or recycling.



### **Solid waste workers at composting and recycling facilities**

Solid waste workers at composting and recycling facilities are responsible for sorting, processing, and managing biodegradable and non-biodegradable waste.





## **Mechanical septic tank and pit emptier**

Mechanical septic tank and pit emptier are workers who operate mechanized equipment to safely empty, transport, and dispose of faecal sludge from septic tanks and pits.



## **Drain cleaners**

Drain cleaners are sanitation workers responsible for removing blockages, silt, and waste from open and closed drains using manual tools or mechanized equipment.



## **Cleaners in Community Sanitary Complex**

Cleaners in community sanitary complex are responsible for maintaining hygiene and sanitation by regularly cleaning, disinfecting, and restocking essential supplies.







# 2

## How to ensure occupational safety of sanitation workers?



## 2.1 Provision of Personal Protective Equipment (PPEs), tools and safety devices

PPE serves as a vital safeguard for workers against occupational health and safety risks. This equipment typically includes gloves, masks, goggles, helmets, respirators, protective suits and safety shoes. Each sanitation job role exposes specific body parts to different hazards and hence requires appropriate PPEs. The principles for PPE selection and procurement are:

1	<b>Conform with approved (Indian Standard) IS/Central Public Health &amp; Environmental Engineering Organizational (CPHEEO) standards</b> <ul style="list-style-type: none"><li>• Ensure that the specifications are as per IS code</li></ul>
2	<b>Comfort as per climatic conditions</b> <ul style="list-style-type: none"><li>• Ensure material of PPEs that offers comfort and protection in the specific climatic context (should protect workers from extreme heat and cold)</li></ul>
3	<b>Sizing as per individual sanitation worker</b> <ul style="list-style-type: none"><li>• Provide PPE in a wide range of sizes to accommodate workers of all sizes.</li><li>• Include size charts and fitting sessions during PPE demand collation to ensure correct selection.</li></ul>
4	<b>Gender-Specific Designs</b> <ul style="list-style-type: none"><li>• Include gender specific designs for male, female and transgender workers to address their needs and preferences</li><li>• Provide gender-specific PPE where necessary to ensure proper fit and protection.</li></ul>
5	<b>Adjustability and Customization</b> <ul style="list-style-type: none"><li>• Ensure PPE include adjustable features such as straps, belts, and elastic bands to enhance fit and comfort.</li><li>• Provide custom-made PPE for workers with unique requirements or non-standard sizes.</li></ul>
6	<b>Replacement Frequency</b> <ul style="list-style-type: none"><li>• The provision of PPE should not be treated as a one-time activity. Due to regular wear and tear, many types of PPE need frequent replenishment. This factor must be considered when assessing PPE requirements at the district level.</li></ul>



## 2.2 What PPE to provide to each job role?

Sanitation workers often perform overlapping roles, performing multiple tasks to make their ends meet. For instance, a street sweeper might also serve as a pit emptier, or a waste collector might take on additional duties such as drain cleaning or septic tank maintenance. Hence, it is important to provide them with appropriate PPE, tools & equipment required for their specific sanitation job roles.

Certain PPEs are common across the five job roles but are preferred over others for specific reasons, as demonstrated below:

**Figure 1:** PPE Comparison: Choosing Superior Safety Gear for Workplace Hazards



A comprehensive list of PPE, tools, and equipment required for each sanitation job role with their standards/specifications, average cost and range, and a replacement frequency has been provided in the tables below.

## 2.2.1 Street Sweepers & 'Door-to-door' waste collectors

**Figure 2:** PPEs, Tools and Equipment required for street sweepers and door to door waste collectors



1. Swachh Bharat Mission Municipal Solid Waste Management Manual: Part II <https://mohua.gov.in/upload/uploadfiles/files/Part2.pdf>

**Table 1:** PPE specifications and standards for street sweepers and door to door waste collectors

PPE	Specification/Standard	Average Cost in INR <sup>2</sup>	Replacement Frequency <sup>3</sup>	Representative Image
Mechanical Resistant Protective gloves	IS 17466:2020 <sup>4</sup> <b>Material:</b> Good grip/Anti-slip through textured surfaces	50	6 months	
Reflective Jackets	EN:471-2003 + A1:2007 <b>Reflective features:</b> Reflective strips for better visibility in low-light conditions. Secure make heavy-duty jacket with chain zip with 2 pockets, green or orange colour.	30	6 months	
N95 Face Mask	IS 9473:2002 <b>Material:</b> Multi-layer protection to filter out particles and pathogens. Breathable materials without compromising filtration. Replaceable filters to maintain effectiveness over time. NIOSH filter approval rating: N95 <b>Adjustable features:</b> Adjustable nose wires & elastic ear loops for comfortable fit	90	15 days	
Safety Shoe with Steel toe	IS 15298 (Part 2):2016 <b>Material:</b> Steel or composite toes to protect against heavy impacts. <b>Waterproof features:</b> Waterproof to keep feet dry in wet environments. <b>Chemical resistant features:</b> Chemical-resistant to protect against harmful substances. Slip-resistant Soles to prevent slipping on wet or oily surfaces.	600	1 year	

Continued...

2. As per rates accessed on the GEM portal in January 2025

3. As per Advisory by HUDD, Govt. of Odisha dated March 2021

4. <https://www.bis.gov.in/> (accessed January 2025)

Continued...

PPE	Specification/Standard	Average Cost in INR <sup>2</sup>	Replacement Frequency <sup>3</sup>	Representative Image
Safety Goggles	<p>IS 5983:1980</p> <p><b>Material:</b> Polycarbonate molded visor with adjustable arm, dust protection. Comfort Padding around the contact points (forehead &amp; nose)</p> <p><b>Chemical resistant features:</b> Anti-Fog and Anti-Scratch Coating</p> <p><b>Adjustable features:</b> Adjustable straps for a comfortable fit. Full coverage &amp; fit securely around the eyes</p>	130	6 months	

**Note:** The rates for PPE items have been sourced from the GeM portal to establish a baseline.

## 2.2.2 Solid waste workers at composting and recycling facilities

**Figure 3:** PPEs, Tools and Equipment required for solid waste workers at composting and recycling facilities

### Personal Protective Equipment





**Mechanical Resistant Protective gloves**  
Protect hand from mechanical injury. Provide good grip



**Reflective Jackets**  
Used while working during dusk and dawn



**N95 Face Mask**  
Protection from Non oil based particles & Odour protection



**Safety Shoe with Steel toe**  
Feet & toes protection from mechanical injury






**Safety Helmet**  
Head protection



**Solid waste workers at the composting and recycling facilities typically utilize the following tools and equipment to perform their duties. These tools and equipment help reduce manual effort and enhance operational efficiency.<sup>5</sup>**

1. Bunched filament broom
2. Metal tray or plate
3. Rakes & shovels
4. Tongs and grabbers
5. Bins and containers
6. Containerized wheelbarrows or pushcarts
7. Weighing scales and magnetic separators
8. Sorting tables, sieves and screens

**Table 2:** PPE specifications and standards for solid waste workers at composting and recycling facilities

PPE	Specification/Standard	Average Cost in INR <sup>6</sup>	Replacement Frequency <sup>7</sup>	Representative Image
Mechanical Resistant Protective gloves	IS 17466:2020 <sup>8</sup> <b>Material:</b> Good grip/Anti-slip through textured surfaces	50	6 months	
Reflective Jackets	EN:471-2003 + A1:2007 <b>Reflective features:</b> Reflective strips for better visibility in low-light conditions. Secure make heavy-duty jacket with chain zip with 2 pockets, green or orange colour.	30	6 months	
N95 Face Mask	IS 9473:2002 <b>Material:</b> Multi-layer protection to filter out particles and pathogens. Breathable materials without compromising filtration.	90	15 days	

Continued...

5. Swachh Bharat Mission Municipal Solid Waste Management Manual: Part II <https://mohua.gov.in/upload/uploadfiles/files/Part2.pdf>

6. As per rates accessed on the GEM portal in January 2025

7. As per Advisory by HUDD, Govt. of Odisha dated March, 2021

8. <https://www.bis.gov.in/> (accessed January 2025)



Continued...

PPE	Specification/Standard	Average Cost in INR <sup>6</sup>	Replacement Frequency <sup>7</sup>	Representative Image
	<p>Replaceable filters to maintain effectiveness over time. NIOSH filter approval rating: N95</p> <p><b>Adjustable features:</b> Adjustable nose wires &amp; elastic ear loops for comfortable fit</p>			
Safety Shoe with Steel toe	<p>IS 15298 (Part 2):2016</p> <p><b>Material:</b> Steel or composite toes to protect against heavy impacts.</p> <p><b>Waterproof features:</b> Waterproof to keep feet dry in wet environments.</p> <p><b>Chemical resistant features:</b> Chemical-resistant to protect against harmful substances. Slip-resistant Soles to prevent slipping on wet or oily surfaces.</p>	600	1 year	
Helmet with Air vent	<p>EN 397:2012+ A1:2012 or IS 2925:1984 or equivalent</p> <p><b>Material:</b> Made from high-density polyethylene (HDPE) or similar materials to make it impact resistant. Includes vents to prevent heat build-up.</p> <p><b>Chemical resistant features:</b> Adjustable suspension systems for a secure fit.</p> <p><b>Adjustable features:</b> Reflective elements to enhance visibility in low-light environments</p>	130	1 year	

**Note:** The rates for PPE items have been sourced from the GeM portal to establish a baseline.

### 2.2.3 Mechanical Septic tank and Pit emptier

**Figure 4:** PPEs, Tools and Equipment required for mechanical septic tank and pit emptier worker



**Personal Protective Equipment**


- **Body Suit**  
Overall body protection while emptying septic tank
- **Safety Eyewear (Splash google)**  
Protection to the eyes from contaminated water and dust/smoke
- **Helmet with Air vent**  
Head protection in spaces where there is a risk of being injured with the provision of light for better visibility
- **N95 Face Mask**  
To filter the air
- **Mechanical Resistant Protective gloves**  
Protect hand from mechanical injury.  
Provide good grip
- **Gum Boot**  
Protects the feet from coming in contact with contaminated surfaces and water



**Mechanical Septic tank and Pit emptier typically utilize the following tools and equipment to perform their duties. These tools and equipment help reduce manual effort and enhance operational efficiency.**

1. Barricade & caution tape
2. Caution board
3. Maintenance hole cover lifter

**Table 3:** PPE specifications and standards for mechanical septic tank and pit emptier worker

PPE	Specification/Standard	Average Cost in INR <sup>9</sup>	Replacement Frequency <sup>10</sup>	Representative Image
Body Suit	<p>IS 17467 : Part 4: 2020<sup>11</sup> or EN 13034:2005 + A1:2009</p> <p><b>Material:</b> Water repellent cotton material with reflective stripes. Breathable design allowing air circulation.</p> <p><b>Chemical resistant features:</b> Chemical-resistant to protect against spills.</p> <p><b>Adjustable features:</b> Elasticated features for waist and ankle for better fitting.</p> <p><b>Reflective features:</b> Reflective strips for better visibility in low-light conditions.</p>	1500	2 years	
Safety Eyewear (Splash google)	<p>IS 5983:1980 certified</p> <p>3M 1621 &amp; equivalent</p> <p><b>Material:</b> Polycarbonate moulded visor with adjustable arm, dust protection. Comfort padding around the contact points (forehead &amp; nose)</p> <p><b>Chemical resistant features:</b> Anti-fog and anti-scratch coating</p> <p><b>Adjustable features:</b> Adjustable straps for a comfortable fit. Full coverage &amp; fit securely around the eyes</p>	130	6 months	

Continued...

9. As per rates accessed on the GEM portal in January 2025

10. As per Advisory by HUDD, Govt. of Odisha dated March, 2021

11. <https://www.bis.gov.in/> (accessed January 2025)


Continued...

PPE	Specification/Standard	Average Cost in INR <sup>9</sup>	Replacement Frequency <sup>10</sup>	Representative Image
Helmet with Air vent	<p>IS 2925:1984 or EN 397:2012+ A1:2012 or equivalent</p> <p><b>Material:</b> Made from high-density polyethylene (HDPE) or similar materials to make it impact resistant. Includes vents to prevent heat build-up.</p> <p><b>Adjustable features:</b> Adjustable suspension systems for a secure fit.</p> <p><b>Reflective features:</b> Reflective elements to enhance visibility in low-light environments</p>	130	1 years	
Gum boots	<p>IS 12254:1993<sup>12</sup></p> <p><b>Material:</b> Full PVC 15" long gumboot hard polyvinyl chloride (PVC) outsole water resistant, inner cotton lining black colour. Slip-resistant soles to prevent slipping on wet or oily surfaces.</p> <p><b>Waterproof features:</b> Waterproof to keep feet dry in wet environments.</p> <p><b>Chemical resistant features:</b> Chemical-resistant to protect against harmful substances.</p>	650	1 year	
N95 Face Mask	<p>IS 9473:2002 NIOSH filter approval rating: N95</p> <p><b>Material:</b> Multi-layer protection to filter out particles and pathogens. Breathable materials without compromising filtration. Replaceable filters to maintain effectiveness over time.</p>	90	15 days	

Continued...

12. <https://www.bis.gov.in/> (accessed January 2025)

Continued...

PPE	Specification/Standard	Average Cost in INR <sup>9</sup>	Replacement Frequency <sup>10</sup>	Representative Image
	<b>Adjustable features:</b> Adjustable nose wires & elastic ear loops for comfortable fit			
Mechanical Resistant Protective gloves	IS 17466:2020 <b>Material:</b> Good grip/Anti-slip through textured surfaces	50	6 months	

**Note:** The rates for PPE items have been sourced from the GeM portal to establish a baseline.

## 2.2.4 Drain Cleaners

**Figure 5:** PPEs, Tools and Equipment required for drain cleaners

### Personal Protective Equipment





**Chest Wader with Boots**  
Used in wet areas such as drains to avoid contact with contaminated water/chemicals.



**N95 Face Mask**  
To filter the air contaminated with viruses, dust and foul smell



**Safety Helmet**  
Head protection



**Safety Eyewear (Splash google)**  
Protect eye from coming in direct contact with contaminated water



**Heavy-duty Nitrile gloves**  
Protection of hands against germs, bacteria, chemical agents etc., while cleaning



**Reflective Jacket / Safety Jacket**  
To signal the person's existence in places and situations






**Drain cleaners typically utilize the following tools and equipment to perform their duties. These tools and equipment help reduce manual effort and enhance operational efficiency.**

- |            |                 |
|------------|-----------------|
| 1. Shovel  | 4. Drain Auger  |
| 2. Spade   | 5. Bucket       |
| 3. Plunger | 6. Cutter tools |

**Table 4:** PPE Specifications and Standards for drain cleaners

PPE	Specification/Standard	Average Cost in INR <sup>13</sup>	Replacement Frequency <sup>14</sup>	Representative Image
Chest Wader with Boots	<p>ASTM F2412-18</p> <p><b>Material:</b> 70D PVC knitted fabric. Durable &amp; Tear-resistant fabric to withstand rough conditions.</p> <p><b>Waterproof features:</b> 100 % waterproof to protect against spills.</p> <p><b>Chemical resistant features:</b> Chemical-resistant to protect against spills.</p> <p><b>Adjustable features:</b> Elasticated features like belt loop for better fitting and comfortable usage. Wide thigh circumference will allow your flexibility when wearing.</p>	9000	4 Years	

Continued...

13. As per rates accessed on the GEM portal in Jan 2025

14. As per Advisory by HUDD, Govt. of Odisha dated March, 2021

Continued...

PPE	Specification/Standard	Average Cost in INR <sup>13</sup>	Replacement Frequency <sup>14</sup>	Representative Image
N95 Face Mask	<p>IS 9473:2002 NIOSH filter approval rating: N95</p> <p><b>Material:</b> Multi-layer protection to filter out particles and pathogens. Breathable materials without compromising filtration. Replaceable filters to maintain effectiveness over time.</p> <p><b>Adjustable features:</b> Adjustable nose wires &amp; elastic ear loops for comfortable fit</p>	90	15 days	
Safety Helmet	<p>IS 2925:1984 certified PN 542 or EN 397:2012+A1:2012 &amp; equivalent</p> <p><b>Material:</b> Made from high-density polyethylene (HDPE) or similar materials to make it impact resistant. Includes vents to prevent heat build-up.</p> <p><b>Adjustable features:</b> Adjustable suspension systems for a secure fit.</p> <p><b>Reflective features:</b> Reflective Elements to enhance visibility in low-light environments</p>	130	1 Year	
Safety Eyewear (Splash goggles)	<p>IS 5983:1980<sup>15</sup></p> <p><b>Material:</b> Polycarbonate moulded visor with adjustable arm, dust protection. Comfort Padding around the contact points (forehead &amp; nose)</p>	130	6 months	

Continued...

15. <https://www.bis.gov.in/> (accessed January 2025)

Continued...

PPE	Specification/Standard	Average Cost in INR <sup>13</sup>	Replacement Frequency <sup>14</sup>	Representative Image
	<p><b>Chemical resistant features:</b> Anti-fog and anti-scratch coating</p> <p><b>Adjustable features:</b> Adjustable straps for a comfortable fit. Full coverage &amp; fit securely around the eyes</p>			
Heavy-duty Nitrile gloves	<p>IS 6994: Part 1:2021 or EN ISO 374-1:2016, length 13"</p> <p><b>Material:</b> Flock-lined 100% nitrile green shade flock lining for perspiration absorption. Durable, thick, high-quality materials that resist tearing. Breathable and anti-sweat during prolonged use. Good grip/ Anti-slip through textured surfaces</p> <p><b>Waterproof features:</b> Waterproof and washable</p>	30	3 months	
Reflective Jacket / Safety Jacket	<p>EN:471-2003 + A1:2007</p> <p><b>Reflective features:</b> Reflective strips for better visibility in low-light conditions. Secure make heavy-duty jacket with chain zip with 2 pockets, green or orange colour.</p>	30	6 months	

**Note:** The rates for PPE items have been sourced from the GeM portal to establish a baseline.



## 2.2.5 Cleaners of community sanitary complex

**Figure 6:** PPEs, Tools and Equipment required for cleaners of community sanitary complex

**Personal Protective Equipment**





**N95 Face Mask**  
Protection from Non-oil based particles & Odour protection



**Safety Shoe with Steel toe**  
Keep legs & feet safe, dry and prevent slip, trip, fall, etc.



**Safety Eyewear**  
Protect eye from coming in direct contact with contaminated water



**Nitrile gloves**  
Protection of hands against contamination



**Body protective PVC Apron**  
Protection from contaminated water as well as cleaning acid & agents



**Cleaners of community sanitary complex typically utilize the following tools and equipment to perform their duties. These tools and equipment help reduce manual effort and enhance operational efficiency.**

1. Broom
2. Wipers
3. Bowl & tile brush, plungers
4. Bucket and mug
5. Sponge & Cloth

**Table 5:** PPE Specifications and Standards for cleaners of community sanitary complex.

PPE	Specification/Standard	Average Cost in INR <sup>16</sup>	Replacement Frequency <sup>17</sup>	Representative Image
N95 Face Mask	<p>IS 9473:2002 NIOSH filter approval rating: N95</p> <p><b>Material:</b> Multi-Layer Protection to filter out particles and pathogens. Breathable materials without compromising filtration. Replaceable filters to maintain effectiveness over time.</p> <p><b>Adjustable features:</b> Adjustable nose wires &amp; elastic ear loops for comfortable fit</p>	90	15 days	
Safety Shoes	<p>IS 15298 (Part 2):2016</p> <p><b>Material:</b> Steel or composite toes to protect against heavy impacts.</p> <p><b>Waterproof features:</b> Waterproof to keep feet dry in wet environments.</p> <p><b>Chemical resistant features:</b> Chemical-resistant to protect against harmful substances. Slip-Resistant Soles to prevent slipping on wet or oily surfaces.</p>	600	1 year	
Safety Eyewear	<p>IS 5983:1980</p> <p><b>Material:</b> Polycarbonate moulded visor with adjustable arm, dust protection. Comfort padding around the contact points (forehead &amp; nose)</p>	130	6 months	

Continued...

16. As per rates accessed on the GEM portal in Jan 2025

17. As per Advisory by HUDD, Govt. of Odisha dated March, 2021

Continued...

PPE	Specification/Standard	Average Cost in INR <sup>16</sup>	Replacement Frequency <sup>17</sup>	Representative Image
	<p><b>Chemical resistant features:</b> Anti-fog and anti-scratch coating</p> <p><b>Adjustable features:</b> Adjustable straps for a comfortable fit. Full coverage &amp; fit securely around the eyes</p>			
Nitrile gloves	<p>IS 6994: Part 1:2021 or EN ISO 374-1:2016, length 13"</p> <p><b>Material:</b> Flock-lined 100% nitrile green shade flock lining for perspiration absorption. Durable, thick, high-quality materials that resist tearing. Breathable and anti-sweat during prolonged use. Good grip/ Anti-slip through textured surfaces</p> <p><b>Waterproof features:</b> Waterproof and Washable</p>	30	3 months	
Body protective PVC Apron	<p>IS 15071: 2002 or EN 13034:2005 + A1:2009</p> <p><b>Material:</b> Made using virgin PVC material</p> <p><b>Waterproof features:</b> Waterproof to keep dry in wet environments.</p> <p><b>Chemical resistant features:</b> Chemical-Resistant to protect against harmful substances.</p>	100	6 months	

**Note:** The rates for PPE items have been sourced from the GeM portal to establish a baseline.



## 2.2.6 Consolidated List of PPEs

**Table 6:** PPE Specifications and Standards for all PPE items





PPE	Specification/Standard	Average Cost in INR <sup>18</sup>	Replacement Frequency <sup>19</sup>	Representative Image
N95 Face Mask	<p>IS 9473:2002 NIOSH filter approval rating: N95</p> <p><b>Material:</b> Multi-Layer Protection to filter out particles and pathogens. Breathable materials without compromising filtration. Replaceable filters to maintain effectiveness over time.</p> <p><b>Adjustable features:</b> Adjustable nose wires &amp; elastic ear loops for comfortable fit</p>	90	15 days	
Safety Eyewear	<p>IS 5983:1980</p> <p><b>Material:</b> Polycarbonate moulded visor with adjustable arm, dust protection. Comfort padding around the contact points (forehead &amp; nose)</p> <p><b>Chemical resistant features:</b> Anti-fog and anti-scratch coating</p> <p><b>Adjustable features:</b> Adjustable straps for a comfortable fit. Full coverage &amp; fit securely around the eyes</p>	130	6 months	
Nitrile gloves	<p>IS 6994: Part 1:2021 or EN ISO 374-1:2016, length 13"</p> <p><b>Material:</b> Flock-lined 100% nitrile green shade flock lining for perspiration absorption. Durable, thick, high-quality materials that resist tearing. Breathable and anti-sweat during prolonged use. Good grip/Anti-slip through textured surfaces</p> <p><b>Waterproof features:</b> Waterproof and Washable</p>	30	3 months	

Continued...

18. As per rates accessed on the GEM portal in Jan 2025

19. As per Advisory by HUDD, Govt. of Odisha dated March, 2021

Continued...

PPE	Specification/Standard	Average Cost in INR <sup>18</sup>	Replacement Frequency <sup>19</sup>	Representative Image
Mechanical Resistant Protective gloves	IS 17466:2020 <sup>20</sup> <b>Material:</b> Good grip/Anti-slip through textured surfaces	50	6 months	
Safety Shoes	IS 15298 (Part 2):2016 <b>Material:</b> Steel or composite toes to protect against heavy impacts. <b>Waterproof features:</b> Waterproof to keep feet dry in wet environments. <b>Chemical resistant features:</b> Chemical-resistant to protect against harmful substances. Slip-Resistant Soles to prevent slipping on wet or oily surfaces.	600	1 year	
Gum boots	IS 12254:1993 <b>Material:</b> Full PVC 15" long gumboot hard polyvinyl chloride (PVC) outsole water resistant, inner cotton lining black colour. Slip-resistant soles to prevent slipping on wet or oily surfaces. <b>Waterproof features:</b> Waterproof to keep feet dry in wet environments. <b>Chemical resistant features:</b> Chemical-resistant to protect against harmful substances.	650	1 year	
Helmet with Air vent	IS 2925:1984 certified PN 542 or EN 397:2012+A1:2012 & equivalent <b>Material:</b> Made from high-density polyethylene (HDPE) or similar materials to make it impact resistant. Includes vents to prevent heat build-up.	130	1 Year	

Continued...

20. <https://www.bis.gov.in/> (accessed January 2025)

Continued...

PPE	Specification/Standard	Average Cost in INR <sup>18</sup>	Replacement Frequency <sup>19</sup>	Representative Image
	<p><b>Adjustable features:</b> Adjustable suspension systems for a secure fit.</p> <p><b>Reflective features:</b> Reflective elements to enhance visibility in low-light environments</p>			
Body Suit	<p>IS 17467 : Part 4: 2020<sup>21</sup> or EN 13034:2005 + A1:2009</p> <p><b>Material:</b> Water repellent cotton material with reflective stripes. Breathable design allowing air circulation.</p> <p><b>Chemical resistant features:</b> Chemical-resistant to protect against spills.</p> <p><b>Adjustable features:</b> Elasticated features for waist and ankle for better fitting.</p> <p><b>Reflective features:</b> Reflective strips for better visibility in low-light conditions.</p>	1500	2 years	
Chest Wader with Boots	<p>ASTM F2412-18</p> <p><b>Material:</b> 70D PVC knitted fabric. Durable &amp; Tear-resistant fabric to withstand rough conditions.</p> <p><b>Waterproof features:</b> 100 % waterproof to protect against spills.</p> <p><b>Chemical resistant features:</b> Chemical-resistant to protect against spills.</p> <p><b>Adjustable features:</b> Elasticated features like belt loop for better fitting and comfortable usage. Wide thigh circumference will allow your flexibility when wearing.</p>	9000	4 Years	

Continued...

21. <https://www.bis.gov.in/> (accessed January 2025)

Continued...

PPE	Specification/Standard	Average Cost in INR <sup>18</sup>	Replacement Frequency <sup>19</sup>	Representative Image
Body protective PVC Apron	<p>IS 15071: 2002 or EN 13034:2005 + A1:2009</p> <p><b>Material:</b> Made using virgin PVC material</p> <p><b>Waterproof features:</b> Waterproof to keep dry in wet environments.</p> <p><b>Chemical resistant features:</b> Chemical-Resistant to protect against harmful substances.</p>	100	6 months	
Reflective Jacket / Safety Jacket	<p>EN:471-2003 + A1:2007</p> <p><b>Reflective features:</b> Reflective strips for better visibility in low-light conditions. Secure make heavy-duty jacket with chain zip with 2 pockets, green or orange colour.</p>	30	6 months	

**Note:** The rates for PPE items have been sourced from the GeM portal to establish a baseline.

## RESOURCE 1

### LEADING PRACTICE: Advisory by HUDD, Govt. of Odisha on 'Compulsory Use of PPE'



The advisory directs ULBs in Odisha to ensure sanitation workers are provided with adequate PPE meeting the standards & specifications, and that sanitation services are not performed without prescribed safety measures and procedures.

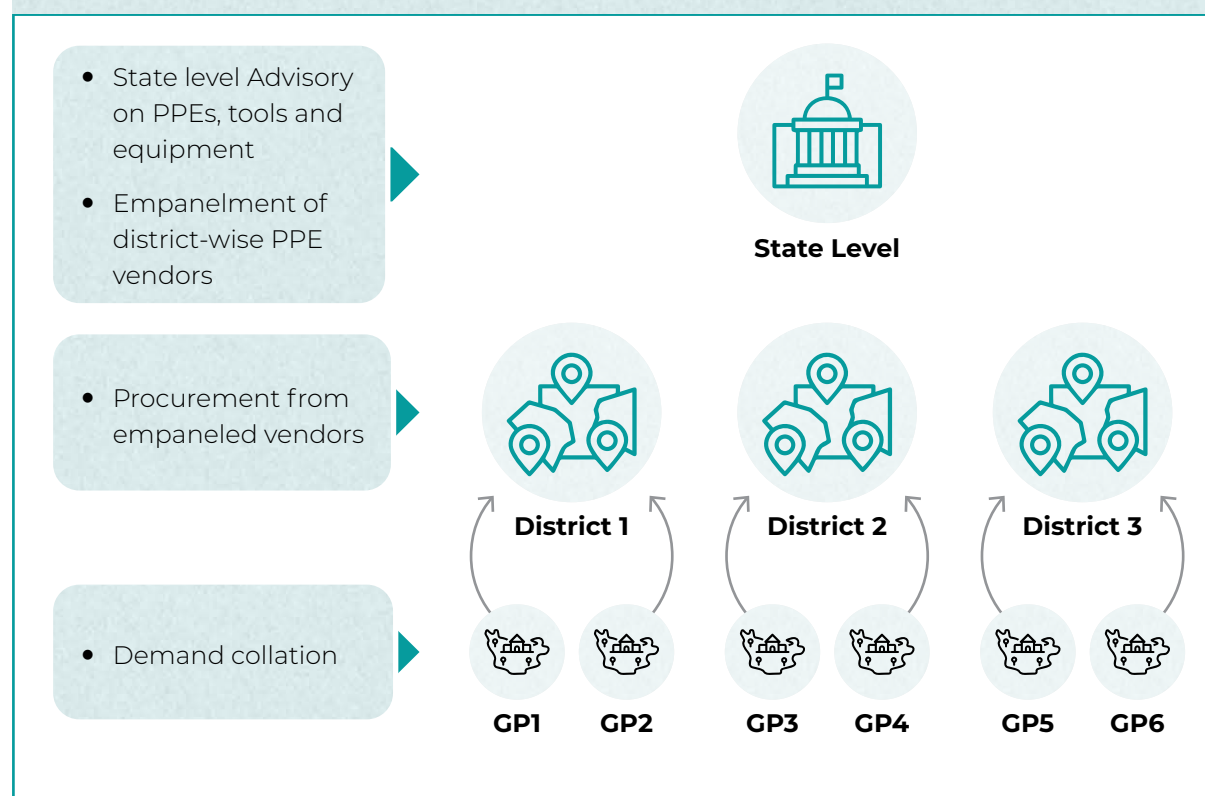




## 2.3 How to procure?

States should institutionalize the process of procurement to ensure the provision of PPE to sanitation workers by enabling policy reforms and financial mechanisms. It is the responsibility of the gram panchayat to provide PPE, tools, and safety equipment to sanitation workers directly engaged by them as well as to enable and monitor provision to workers through private contractors (such provisions should be included in the contract clauses). The process to be followed for procuring PPE, tools & safety equipment is broadly at 3 levels:

**Figure 7:** Process to be followed for procuring PPE, tools & safety equipment



### 2.3.1 Empanelment of district-wise PPE vendors by the State Rural Development Department

The State Rural Development Department should be responsible to facilitate procurement of PPE through empanelment of vendors, issuing of a PPE procurement model contract and introducing monitoring mechanisms. A summary of the vendor empanelment process is provided below, with detailed roles outlined in the annexure. For comprehensive guidance, refer to the following resources outlining the invitations for tenders on vendor empanelment and the procurement of PPE for sanitation workers, as prepared by Water Corporation of Odisha (WATCO) Division 1 – Bhubaneswar, Odisha.

## RESOURCE 2

### **LEADING PRACTICE: Invitation of Tender for empanelment of vendors – A case of Odisha**

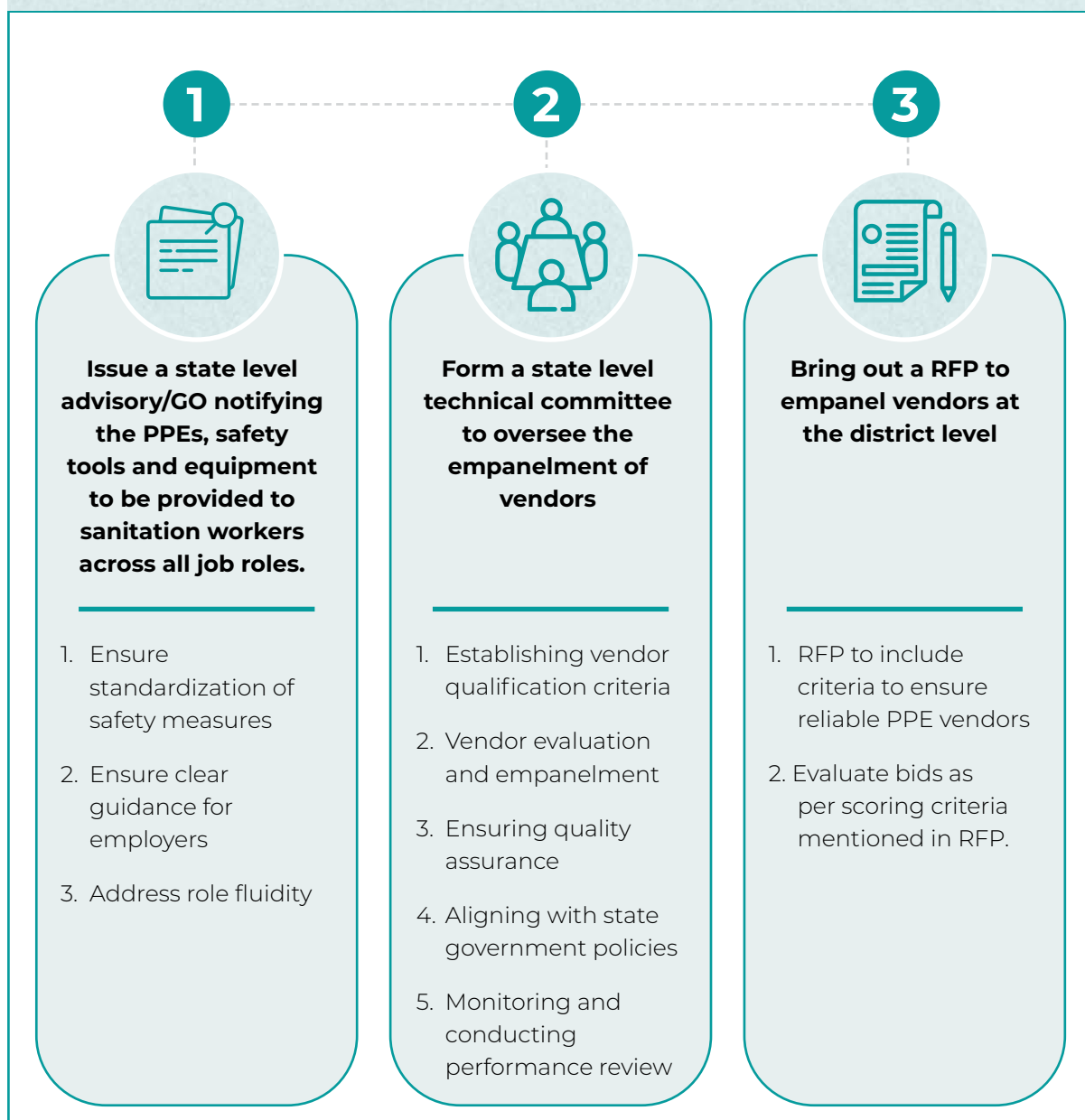


WATCO invited tenders for the empanelment of vendors to supply high-quality, durable PPE for sanitation workers.



*Prepared by WATCO Division 1 - Bhubaneswar*

**Figure 8:** Vendor empanelment process



## RESOURCE 3

### LEADING PRACTICE: Invitation of Tender for supply of PPE for sanitation workers from registered manufacturers



WATCO invites tenders from registered manufacturers for the supply of customised PPE, ensuring a reliable supply chain that meets safety standards. This initiative aims to enhance the protection, comfort, and dignity of sanitation workers by providing high-quality, durable, and well-fitted protective gear tailored to their specific needs.



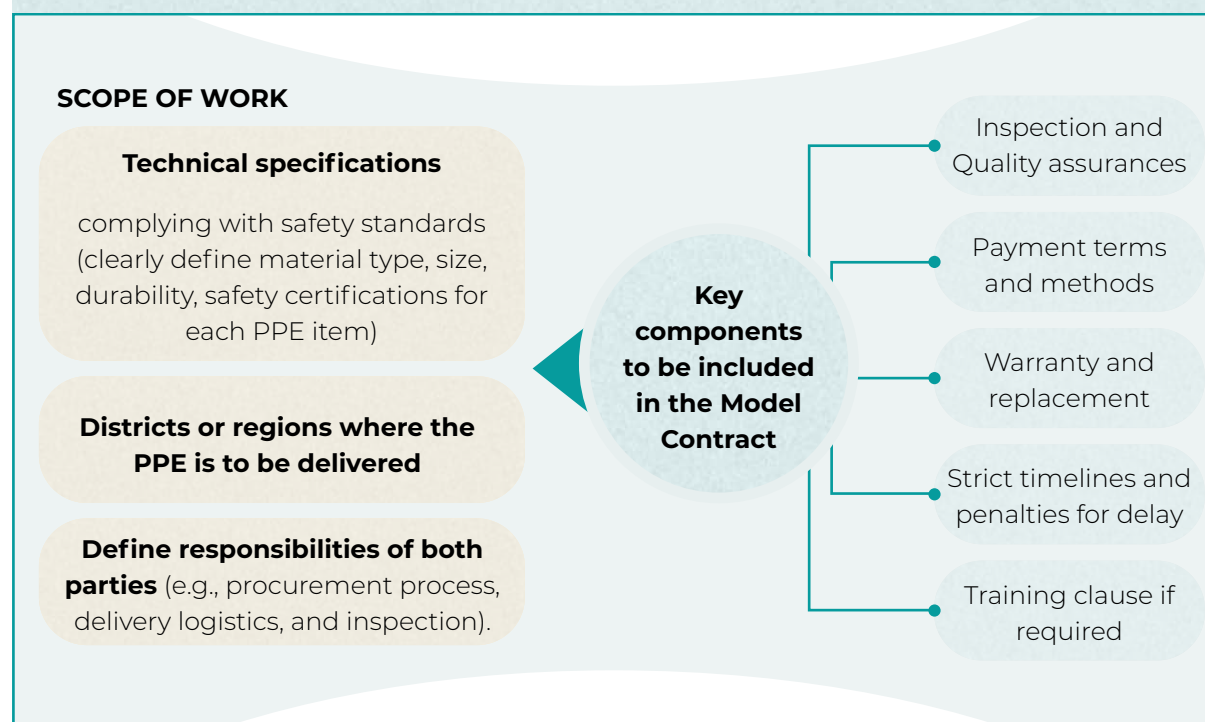
*Prepared by WATCO Division 1 - Bhubaneswar*

## 2.3.2 Procurement process of PPE at district level

### 1. Prepare a model contract for PPE procurement by Districts

The State Rural Development Department will also prepare a model contract which the district offices can use to procure PPEs from the empanelled vendors. This not only simplifies the process for district officials, but ensures consistency, reduced risk of errors and builds vendor's trust and confidence. A model contract should include the following key components:

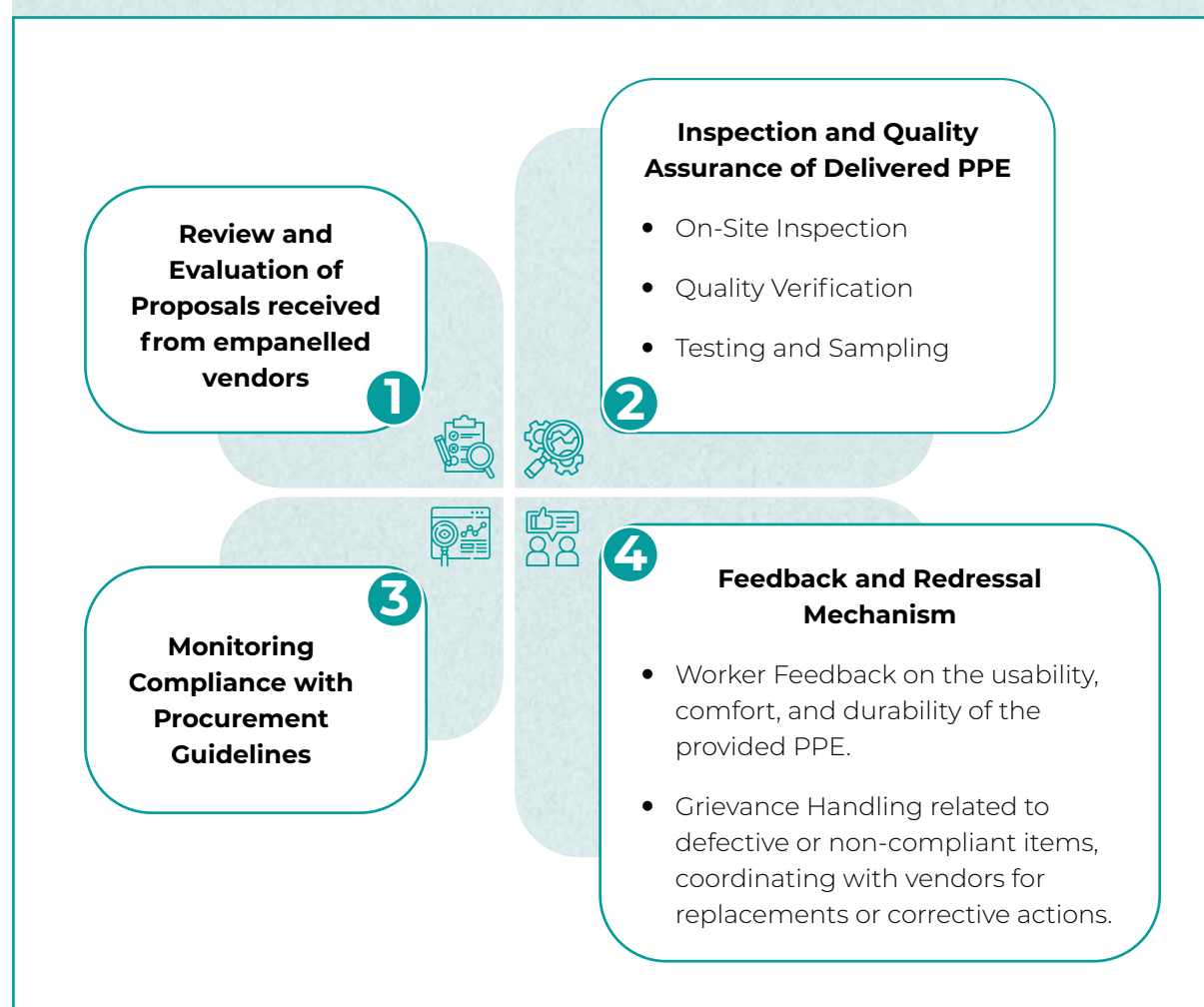
**Figure 9:** Key components of a Model Contract



## 2. Form a District Level PPE Technical Committee for review of procured PPE, tools & equipment:

- The State Rural Development Department should issue an advisory/Government Order (GO) to mandate the formation of a technical committee at district level to review the proposals and conduct technical inspection of the PPEs delivered.
- A representative constitution of the District Level PPE Technical Committee is as follows:
  - ◇ Chairperson (District Development Officer (DDO)),
  - ◇ Head (District Director (SBM)),
  - ◇ District Co-ordinator – SBM Grameen, Solid Liquid Waste Management (SLWM) Consultant/Expert/Engineer, a few block level officials and GP officials.
- The broad scope of the District Level PPE Technical Committee has been mentioned below.

**Figure 10:** Scope of the District level Technical Committee



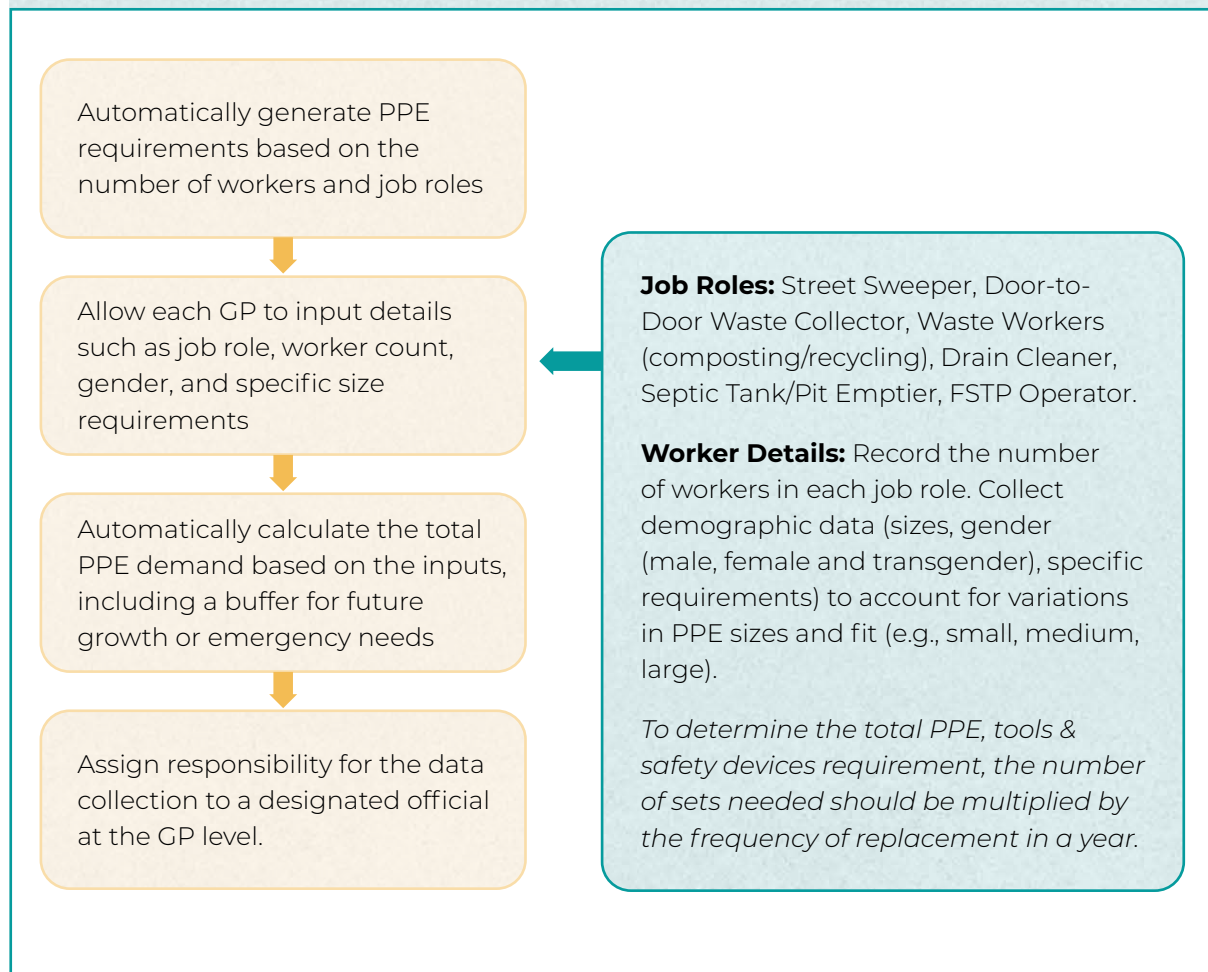


### 2.3.3 Demand Collation of PPEs at GP/ Block Level

The process of collating PPE demand at the gram panchayat level, considering all five sanitation job roles, their sizes, and gender-specific requirements, a following structured approach is recommended. This approach involves developing a centralized, digital demand collection spreadsheet to gather data from the GP level.

**The centralized PPE demand collection tool should:**

**Figure 11:** Scope of the District level Technical Committee



To enhance the gram panchayat's understanding of collating PPE demand, the following example has been provided:

Model for calculating the estimated annual cost of PPE procurement for a gram panchayat

**1. Identify the number of sanitation workers**

CT/PT workers: 3

Street sweepers: 4

Solid waste workers at Composting and Recycling facilities: 2

Drain cleaners: 3

Septic tank and pit emptier: 2

**2. Calculate the number of PPE items per worker per year (consider the frequency of each item)**

Total no. of PPE items for CT/PT worker per year includes:

***Total no. of N95 mask for a worker per year = Total no. of days in a year/  
Frequency of replacement for N95 mask***

Total no. of N95 mask for a worker per year =  $365/15 = 24$

*Thus, total no. of N95 mask for a CT/PT worker per year = 24 nos.*

Similarly, calculate the number of items required per year for the other four PPE: safety shoes, safety eyewear, heavy-duty nitrile gloves, and body protective PVC apron.

*Total no. of safety shoes for a CT/PT worker per year = 1 nos.*

*Total no. of safety eyewear for a CT/PT worker per year = 2 nos.*

*Total no. of heavy-duty nitrile gloves for a CT/PT worker per year = 4 nos.*

*Total no. of body protective PVC apron for a CT/PT worker per year = 2 nos.*

***Cost of 'n' PPE items = (Cost of PPE item) x (No. of PPE item per year)***

Cost of '24' N95 masks =  $100 \times 24 = \text{Rs. } 2,400$

Cost of PPE for CT/PT worker per year = Sum of costs of all PPE items

Cost of PPE for CT/PT worker per year =  $2,400 + 1400 + 300 + 600 + 1400$

### 3. Calculate PPE cost per worker per year

Worker Category	PPE Cost Per Worker (Rs.)
CT/PT Worker	6,100
Street Sweeper	4,760
Solid Waste Worker at composting and recycling facilities	4,760
Drain Cleaner	14,100
Septic Tank & Pit Emptier	6,060

### 4. Calculate total PPE cost for all sanitation workers

Worker Category	No. of Workers	Total PPE Cost (Rs.)
CT/PT Workers	3	18,300
Street Sweepers	4	19,040
Solid Waste Workers	2	9,520
Drain Cleaners	3	42,300
Septic Tank & Pit Emptier	2	12,120
<b>Total PPE Cost</b>	<b>14 Workers</b>	<b>1,01,280</b>

**The gram panchayat will have to raise a demand of Rs. 1,01,280 to the block/district for procuring PPE for 14 sanitation workers of the above-mentioned job roles for a year.**

The gram panchayat should raise a demand depending upon the storage inventory and the storage capacity available with them. Procurement to be done on a bi-yearly or yearly basis as per the feasibility of the gram panchayat. Data Consolidation to be done at the block/district Level.

#### **Place purchase order based on the collated PPE demand at block levels**

The Director/DDO at the district level will issue a purchase order addressed to the finalized empanelled vendors ANNEXURE 3.2.

## 2.4 Post-Procurement Storage and Maintenance of PPE at Gram Panchayat (GP) level

### a. Dedicated Storage Area for PPE

- Provide a clean and secure storage area: Ensure the PPE storage area is clean, dry, and secure to maintain the Equipment effectiveness and safety.
- Ensure proper ventilation: The storage area should be well-ventilated to prevent moisture build-up that could compromise the integrity of the PPE.
- Protect from environmental damage: Shield the storage area from direct sunlight and extreme temperatures, as these conditions can degrade PPE and reduce its protective capabilities.

### b. Systematic Organization of PPE

- Organize by type and size: Arrange PPE systematically by type and size for easy accessibility and proper usage.
- Label clearly: Clearly label storage containers with their contents and expiration dates to facilitate quick identification and efficient inventory management.
- Prevent misuse: Use concise labeling to ensure the correct PPE is readily available, minimizing the risk of using expired or incorrect equipment.

### c. Regular Maintenance of PPE

- Routine inspections: Conduct regular inspections of PPE to identify and address any damage, deterioration, or contamination. Immediately discard any compromised or expired equipment.
- Clean and disinfect storage areas: Periodically clean and disinfect PPE storage areas and containers to maintain a hygienic environment, ensuring the safety and functionality of the stored equipment.

### d. Safe Disposal of PPE

- Establish a disposal system: Develop a safe and environmentally friendly disposal system for used PPE to prevent contamination and ensure compliance with regulations.
- Follow local guidelines: Dispose of PPE in accordance with local guidelines and the amended Solid and Liquid Waste Management Rules, 2016, to ensure proper handling and environmental safety.

Finance for the procurement of PPE, tools & Equipment could be leveraged through the following:

**SBM-Grameen  
(Centre + State)**

**15th Finance  
Commission**

**Public Private  
partnership**

**State Corpus**

**CSR/Business  
Development  
fund**



## 2.5 Usage of PPEs and safety devices

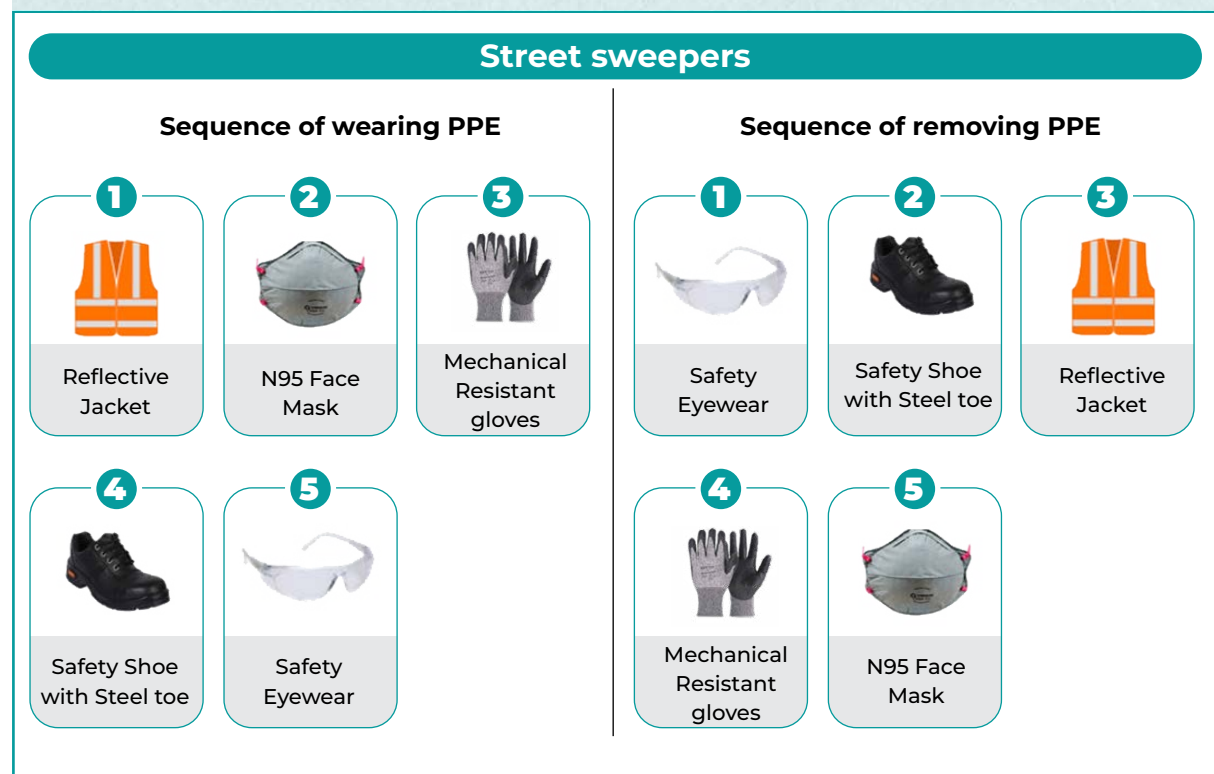
### 2.5.1 Donning and doffing of PPEs

Donning refers to the sequence of wearing PPE, while doffing refers to the sequence of removing PPE.

Sanitation workers are exposed to harmful biological, chemical, and physical hazards in their work environments, such as fecal sludge, wastewater, sharp objects, and hazardous gases. Correct donning ensures that all parts of the body are adequately protected before beginning work. Proper doffing prevents accidental exposure to contaminants on the PPE surface, reducing the risk of infection or injury. Sanitation workers must wash their hands with water and soap both before wearing and after removing PPE.

The donning and doffing sequences for each job role are specified in the tables below:

**Figure 12:** Donning & Doffing sequence for street sweepers and 'door to door' waste collectors



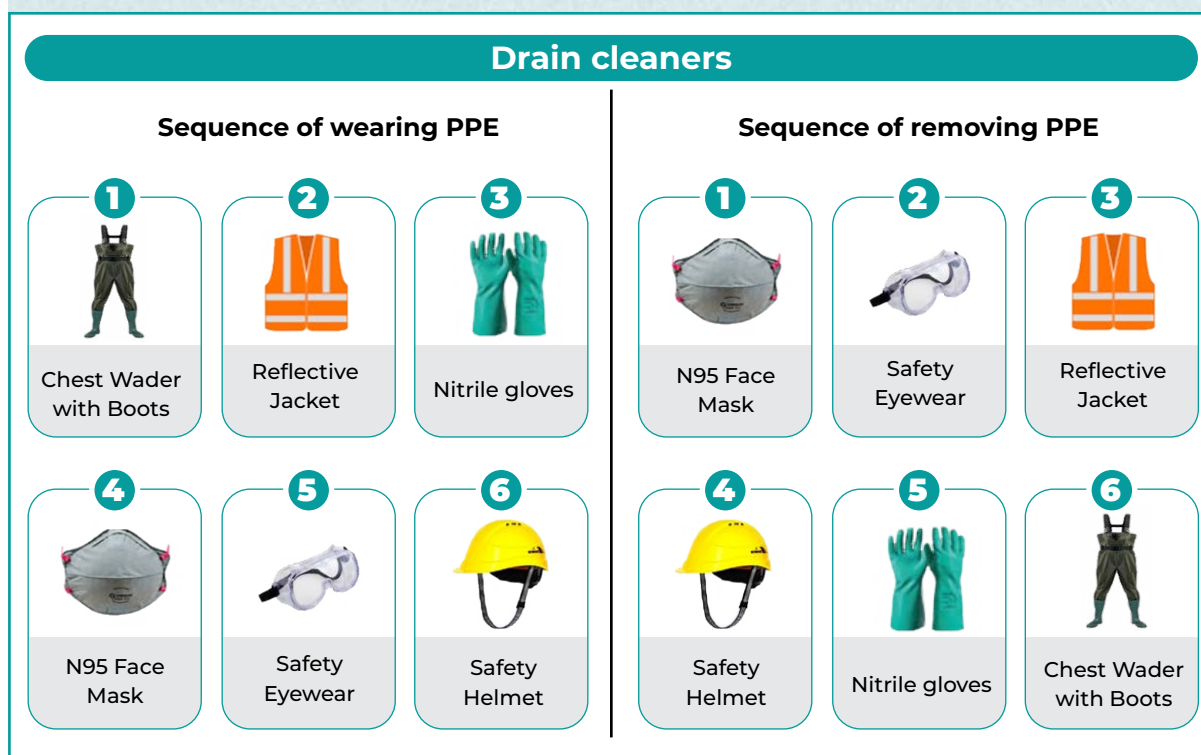
**Figure 13:** Donning and Doffing sequence for solid waste workers at composting and recycling facilities



**Figure 14:** Donning and Doffing sequence for septic tank and pit emptier



**Figure 15:** Donning and Doffing sequence for drain cleaners



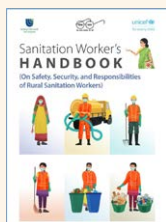
**Figure 16:** Donning and Doffing sequence for cleaner of community sanitary complex



For detailed guidance on the safety, security, and responsibilities of rural sanitation workers, refer to the RESOURCE 4.

## RESOURCE 4

### ***Sanitation Worker's Handbook (On Safety, Security & Responsibilities of Rural Sanitation Workers)***



This handbook provides information on the roles, responsibilities, employment modes, rights, and entitlements of the sanitation workers in rural areas.



*Prepared by Urban Management Centre for UNICEF*

## **2.5.2 Sanitation Workers' Responsibilities for PPE maintenance and Storage**

Proper storage and maintenance of PPE are crucial for ensuring their effectiveness and longevity. By storing PPE in a clean, dry, and secure environment, and regularly inspecting and cleaning them, workers can prevent damage, contamination, and degradation. For proper maintenance, the sanitation workers should take the following steps:

- Store PPE in clean and dry space to ensure its effectiveness and safety.
- Organize the PPE systematically by type and size to ensure easy access and proper usage.
- PPE that is reusable (such as gloves, boots, and goggles) should be regularly cleaned and disinfected. Use dedicated cleaning stations for washing and sanitizing reusable equipment after every shift.
- Regular maintenance of PPE which includes checking for any damage, deterioration, or contamination. Any damaged or expired PPE should be discarded immediately to prevent the use of compromised equipment.
- Dispose PPE properly as per the local guidelines and as per the amended Solid & Liquid Waste Management Rules, 2016. It is important to follow local guidelines and regulations for the disposal of contaminated waste.

## **2.5.3 Allocation/designated space for workers to change into their PPEs**

Workers face challenges in washing, changing and storing their clothes after work due to the absence of private spaces. As a result, they are forced to return home in their work clothes, potentially carrying germs into their households. To reduce these



challenges, the officials should facilitate the development of a '**Clean changing space for sanitation workers**'. The following measures are necessary for the provision of such a space:

- **Advisory from state:** Advisory to be floated to all gram panchayats/blocks/districts to provide a space for the sanitation workers. The changing space should be of the following specifications:
  - (a) It should/can be located in the institutional facility (CT/PT, etc.) or public building (Gram Panchayat office, etc.).
  - (b) The space should have storage facilities like lockers as per the number of the sanitation workers in the GP to store their belongings.
  - (c) The space should have adequate drying space for PPE.
  - (d) The space should have a washroom and changing area for the sanitation workers.
- **Maintenance of space**
  - (a) The sanitation workers will be responsible for maintaining the space in terms of cleaning and security.
  - (b) The maintenance costs of the facility will be beared by the Gram Panchayat.

#### 2.5.4 Monitoring usage of PPEs and safety devices at GP level

Monitoring the usage of PPE and safety devices is critical to ensure that workers consistently adhere to safety protocols and remain protected from hazards. Regular monitoring helps identify potential gaps in compliance, preventing misuse or negligence that could lead to accidents or exposure. The following measures are essential for monitoring the usage of PPEs:

- (a) Swacchagrahis to help monitor usage of PPEs at gram panchayat level:** They should be monitoring the proper usage of PPE; tools & Equipment by sanitation workers as well as ensure that contractual workers also have PPEs.
- (b) Incentivize and recognize sanitation workers**
  - Reward workers for consistent and correct PPE usage every year with recognition or by providing in cash or in-kind awards.

For comprehensive visual references, access the IEC posters and GIFs covering safety measures, job role responsibilities, and best practices for sanitation worker through the resource link given below.

## RESOURCE 5

### **IEC material (Posters & GIFs) on safety, security, responsibilities of rural sanitation workers as well as awareness on safety of sanitation workers**



IEC material emphasizes on the rights, safety measures, and entitlements of sanitation workers, ensuring their safety, dignity, health, and well-being. Four posters were created in six languages, highlighting the importance of wearing PPE while performing job duties.



*Prepared by Urban Management Centre for UNICEF*

## RESOURCE 6

### **LEADING PRACTICE: Initiative to reward sanitation workers for outstanding performance at work – A case of Madhya Pradesh**



Sanitation Worker Recognition Initiative aims to motivate and uplift workers by acknowledging their dedication, efficiency, and exceptional service. Through performance-based rewards, incentives, and public recognition, this initiative enhances morale, productivity, and dignity in the workforce.



*D.O. by Zilla Parishad of Ashok Nagar, Madhya Pradesh*

## 2.6 Training Programmes on ensuring safety of sanitation workers

Most sanitation workers operate with little to no formal training on the occupational risks of their work. They work largely on traditional practices rather than experiencing new technologies. Even the training that is imparted does not stress practical training and demonstration as a methodology. There is a lack of a training ecosystem with a focus on hands-on training of all stakeholders. Training of officials and sanitation workers on the provision and usage of PPE, social entitlements, and financial security is essential to ensure their safety & dignity.

Previously, UNICEF partnered with the Urban Management Centre (UMC) to create training modules for master trainers and sanitation workers. This training was rolled out in 18 states, benefiting over 25,500 workers, making it a proven and effective resource. The content focused on job-specific training for PPE usage, along with

educating workers on their rights and entitlements. The Programme was structured with appropriate pedagogies, emphasizing adult learning principles. Given that many sanitation workers are illiterate or semi-literate, the assessments were designed with pictorial elements to ensure accessibility and understanding.

**Each state must:**

**(a) Contextualize existing training materials for the state.**

- Existing training material prepared by the Urban Management Centre with the support of UNICEF should be utilized for conducting both theoretical and practical training sessions, emphasizing safety, soft skills, and technical skills.
- The focus should be on pictorial representation and practical demonstration to enhance the learning experience of officials and workers.

**(b) Identify training organizations**

Training organizations can be identified through the following methods:

**1. Empanel training organization**

- Identify and partner with Non-Government Organizations (NGOs) and Civil Society Organizations (CSOs) with credible experience to deliver training Programmes at the gram panchayat/block/district level.

**2. Converge with Skill Council for Green Jobs (SCGJ)**

- States may converge with SCGJ to conduct training through their empaneled training providers at the district level.
- States should share the list of the certified Project Management Units (PMU) with the district for training the workers as well as the officials.
- District to ensure certification of the sanitation workers after training.

**(c) Develop training schedules**

- The training should be preferably conducted in a batch size of 25 to 30.
- For sanitation workers, depending upon the number of sanitation workers in a gram panchayat, the training can be conducted:
  1. If the gram panchayat has 25 to 30 sanitation workers, then the training should be organized at the gram panchayat level.
  2. If the gram panchayat has lesser workers than the ideal batch size mentioned, then the training should be organized cluster wise at the block/district level.
  3. Adopt a quarterly training calendar to enhance the capacity of sanitation workers. It will guide the officials at gram panchayat level to ensure effective participation by sanitation workers.

- ◇ For officials, a bi-yearly training calendar should be adopted, and the training should be imparted at the district level.
- ◇ Training schedules should take into consideration the working hours of the sanitation workers.

#### **(d) Identify dedicated training centers**

- The selection of the training center will depend on whether the training is conducted at the district, block, or gram panchayat level:
  1. At the gram panchayat level, training should be conducted at available common spaces in the gram panchayat which are accessible to all sanitation workers.
  2. Training institutes empaneled by SBM Grameen can be utilized for conducting training at the block/district level. The existing training centers at the rural level that can also be utilized for training which include:
    - ◇ Rural Self-Employment Training Institute (RSETI)
    - ◇ State Institute of Rural Development (SIRD)
    - ◇ Rural Development and Management Institute (RUDMI)
    - ◇ Any other state-specific training institute can be identified as well.
- Training center to be well equipped with PPE, tools & safety equipment.
- Training center to be equipped with existing IEC material for creating awareness.

#### **RESOURCE 7**

##### ***Training Material (Training Agenda, Training Module, Framework for Training Assessment)***



Training Material provides a structured framework—Training Agenda, Module, and Assessment—to equip sanitation workers with essential skills. It covers occupational hazards, legal frameworks, rights, roles, safety measures, job-specific tasks, operation & maintenance, social and financial entitlements, and alternative livelihood opportunities.





## RESOURCE 8

### LEADING PRACTICE: Initiative for training of Master Trainers, Kolkata



This D.O serves as an example of a local initiative aimed at improving the skills and knowledge of sanitation workers. It highlights the importance of training and capacity building in ensuring the safe and dignified working conditions for sanitation workers and the effective implementation of solid waste management practices.



*D.O. by Zilla Parishad of Purulia / P & RD department Kolkata*

Finance for conducting the training Programmes for both officials and workers could be leveraged through the **SBM-Grameen – Training & Capacity Building fund**.

## 2.7. Summarising Roles & Responsibilities

**Table 7:** Summary of Roles and Responsibilities

State			
Responsibilities	Technical	Financial	Monitoring & Usage
<b>Mission Director</b>	<ol style="list-style-type: none"> <li>1. Issue an advisory on 'What to procure' that includes standards &amp; specification of PPE.</li> <li>2. Issue an official Government Order (GO) / Notification for formation of state level technical committee to SBM Grameen department.</li> <li>3. Issue an advisory for formation of district level technical committees.</li> <li>4. Bring out an RFP to empanel vendors at district level.</li> <li>5. Approve the final list of district-level empanelled vendors.</li> </ol>	<ol style="list-style-type: none"> <li>1. Approve financial allocations for procurement of services, establishment of facilities and implementation of services</li> </ol>	<ol style="list-style-type: none"> <li>1. Guidance for monitoring mechanism</li> </ol>

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Responsibilities	Technical	Financial	Monitoring & Usage
	<ol style="list-style-type: none"> <li>Issue Letters of Empanelment (LOE) to selected vendors.</li> <li>Issue a PPE procurement model contract.</li> <li>Issue advisory on provision of dedicated space for sanitation workers.</li> <li>Empanel training organizations or converge with SCGJ.</li> <li>Notify list of certified PMUs to the districts for training.</li> </ol>		
<b>Additional Secretary/ Deputy Mission Director (SBM)</b>	Monitor, and evaluate the technical, financial, and implementation aspects of activities to ensure effective execution and compliance.		
<b>State coordinator (SBM)</b>	<ol style="list-style-type: none"> <li>Draft the advisory on 'What to procure?' that includes standards &amp; specification of PPE.</li> <li>Draft advisory for formation of state/district level technical committees.</li> <li>Draft an RFP to empanel vendors.</li> <li>Establish vendor qualification criteria.</li> <li>Conduct technical &amp; financial evaluation of vendor applications.</li> <li>Draft model contracts for procurement from empanelled vendors.</li> <li>Define demand collation tool.</li> <li>Co-ordination between state, district and block for procurement and usage of PPE.</li> </ol>	-	<ol style="list-style-type: none"> <li>Monitor PPE distribution and consumption</li> <li>Co-ordination between state, district and block for procurement and usage of PPE.</li> </ol>

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Responsibilities	Technical	Financial	Monitoring & Usage
<b>State Finance Department representative</b>	1. Ensure inclusion of legal clauses in the contract.	1. Allocate budget 2. Approve financial allocations. 3. Approve financially qualified vendors 4. Settlement of claim.	1. Ensure proper utilization of grants and complete required certification processes.
<b>Procurement Officer</b>	1. Conduct technical & financial evaluation of vendor applications.	1. Align procurement activities with financial policies.	1. Manage inventory and track district procurement orders. 2. Supervise vendor selection. 3. Ensure quality assurance by conducting periodic audits. 4. Monitor procurement & vendor performance

## District

Responsibilities	Technical	Financial	Monitoring & Usage
<b>District Development Officer (DDO)</b>	Provide guidance and recommendations to the Director on planning, monitoring and demand assessment.		
<b>District coordinator (SBM)</b>	1. Finalize source of procurement and placing purchase order. 2. Approve evaluated proposals received from empanelled vendors.	1. Raise invoice to the state. 2. Utilise funds for training.	1. Ensure certification of sanitation workers after training. 2. Monitor PPE distribution and consumption.

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Responsibilities	Technical	Financial	Monitoring & Usage
	<ol style="list-style-type: none"> <li>3. Submit consolidated PPE demand reports to the State.</li> <li>4. Define incentive &amp; recognition framework.</li> <li>5. Prepare purchase order.</li> <li>6. Evaluate proposals received from empanelled vendors.</li> <li>7. Prepare PPE demand reports.</li> <li>8. Aggregate demand of PPE from GP/block at district level.</li> <li>9. Prepare a training calendar and facilitate establishment of training infrastructure.</li> </ol>		<ol style="list-style-type: none"> <li>3. Ensure quality check &amp; inspection of products.</li> <li>4. Implement a system for feedback and grievances.</li> <li>5. Communicate PPE procurement and utilization to the state.</li> </ol>

Block			
Responsibilities	Technical	Financial	Monitoring & Usage
<b>Block co-ordinator (SBM)</b>	<ol style="list-style-type: none"> <li>1. Aggregate demand of PPE from GP at block level.</li> <li>2. Prepare a training calendar and facilitate establishment of training infrastructure.</li> </ol>	-	<ol style="list-style-type: none"> <li>1. Ensure quality check &amp; inspection of products delivered to GP.</li> <li>2. Implement a system for feedback and grievances.</li> <li>3. Co-ordinate and communicate between GP and district.</li> </ol>
<b>Swacchagrahi</b>	-	-	<ol style="list-style-type: none"> <li>1. Ensure and monitor usage of PPE.</li> <li>2. Ensure maintenance of the facility for sanitation workers.</li> </ol>

# 3

## Annexures





## ANNEXURE 3.1

### Process for empanelment of district-wise PPE vendors by the State Rural Development Department

**a. Issue a state level advisory/GO notifying the PPEs, safety tools and equipment to be provided to sanitation workers across all job roles.**

A state-level government advisory mandating and specifying types of PPEs for sanitation workers is essential to ensure:

- **Standardization of Safety Measures**
  - ◆ A state-level advisory can standardize the types and quality of PPE required for different sanitation job roles, ensuring uniform protection across regions.
  - ◆ It helps eliminate inconsistencies in the provision and use of PPE, which may vary between districts or local governments.
- **Clear Guidance for Employers**
  - ◆ By specifying PPE requirements, the advisory/GO provides clear guidance to local governments, contractors, and other employers, reducing ambiguity in their responsibilities.
  - ◆ It ensures that all employers are aware of the minimum safety standards that must be met.
- **Addressing Role Fluidity**
  - ◆ Since many sanitation workers perform multiple roles (e.g., street sweeping, pit emptying, waste collection), the advisory can specify PPE for each task, ensuring adequate protection regardless of their duties.

**b. Form a state level technical committee to oversee the empanelment of vendors:**

A state-level technical committee to oversee the empanelment of vendors can play a crucial role in ensuring the procurement of high-quality PPEs for sanitation workers.

- The broad roles and responsibilities of this technical committee will be to:
  - ◆ **Establishing Vendor Qualification Criteria**
    - ◇ Define clear, standardized criteria for vendor empanelment, including technical, financial, and quality benchmarks.
    - ◇ Ensure vendors demonstrate compliance with relevant safety, certification, and environmental standards.
  - ◆ **Vendor Evaluation and Empanelment**
    - ◇ Review applications from vendors and evaluate them based on

pre-established criteria, ensuring transparency and fairness in the selection process.

- ◇ Conduct on-site inspections, if necessary, to verify vendor capabilities and compliance with safety and quality standards.

- ◆ **Ensuring Quality Assurance**

- ◇ Regularly audit and assess the quality of products supplied by empanelled vendors to ensure they meet the defined standards.
- ◇ Prioritize ensuring that the PPE is suitable for the specific climate conditions.

- ◆ **Aligning with State Government Policies**

- ◇ Ensure vendor empanelment aligns with state and national policies, guidelines and procurement policies.

- ◆ **Monitoring and Performance Review**

- ◇ Develop mechanisms to monitor vendor performance, including timely delivery, product quality, and adherence to contractual terms.
- ◇ Periodically review the performance of vendors and address issues like delays, quality lapses, or non-compliance.

- A recommended list of members of this technical committee includes: Secretary, Mission Director and Deputy Mission Director of SBM Grameen; State level Solid & Liquid Waste Management consultants/experts; State coordinator, Head of the Accounts Department; state level procurement officer.

**c. Bring out a RFP to empanel vendors at the district level**

- The empanelment of PPE vendors should be conducted at the state level, covering all regions and districts. Vendors should be required to specify their preferred districts for supply and provide corresponding cost details for each district.
- The RFP for empanelment should have the following details: (this is a broad list of criteria to ensure the selection of reliable vendors who provide high-quality PPE and support the safety of sanitation workers)
  - ◆ The list of detailed specifications of required PPE (material, durability, safety standards compliance, etc.) as per state advisory/GO.
  - ◆ Eligibility criteria:
    - i. General Eligibility:**
      - ◇ **Registration and Licensing:** Vendors must be registered businesses with valid trade licenses, GST registration, and any other applicable regulatory approvals.

- ◆ **Experience:** A proven track record in manufacturing or supplying PPE, preferably for sanitation workers or related sectors.
    - ◆ **Financial Stability:** Submission of audited financial statements for the past 2-3 years to demonstrate financial capability.
  - ii. **Product Quality and Standards must meet BIS/ISO/EN standards as specified in the state advisory. In addition, PPE features should be climate-appropriate to improve uptake by sanitation workers.**
  - iii. **Supply and Distribution Capacity**
    - ◆ **Local Presence or Network:** Vendors must demonstrate the ability to supply PPE to the specified districts within agreed timelines. Local distribution networks or warehouses will be an advantage.
    - ◆ **Scalability:** Ability to handle large orders and scale up supply if needed during emergencies or increased demand.
    - ◆ **Timely Delivery:** Proven ability to adhere to delivery schedules and meet deadlines.
  - iv. **Competitive Pricing and district specific costs:** Vendors must offer competitive and fair pricing for their products and provide clear cost proposals for each district, factoring in logistics and distribution costs.
  - v. **After-Sales Support**
    - ◆ **Warranty and Replacement Policy:** Clear policies for defective products, including warranties, returns, and replacements.
    - ◆ **Training and Demonstration:** If required by the state, this may be added as a responsibility of the vendors to offer training or demonstrations on the proper use and maintenance of PPE.
    - ◆ **Customer Support:** Availability of a responsive customer service team to address issues and complaints.
  - vi. **Documentation Requirements**
    - ◆ **Certifications and Test Reports:** Submission of relevant quality certificates and product test reports.
    - ◆ **Client References:** References from previous clients to verify reliability and product quality.
    - ◆ **Compliance Declarations:** Written declaration of compliance with procurement guidelines and safety standards.
- Evaluate bids received based on an evaluation and scoring criteria defined in the RFP.

## ANNEXURE 3.2

### Specimen of Purchase Order for procurement of PPE

\_\_\_\_\_DRDA

Letter No.:

Date:

To,

The (name and address of the vendor)

Sub: Procurement of PPE and safety devices

Ref:

Dear Sir/Ma'am,

With reference to the above, purchase order is hereby placed on you for supply of the items mentioned in the following table:

S. No.	Name of the Item	Standard/ specification	Quantity
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

However, the DRDA reserves the right to increase or decrease the quantity of the order.

Yours faithfully

Director / DDO  
(Name of the District)

## ANNEXURE 3.3

### Payment and delivery schedule for PPE & safety equipment

S. No.	Key Stages	Amount Payable (Percentage of total bill amount)	Delivery Schedule
1	After receiving the purchase order, the delivery of items must be made within 60 days from the date of issued PO	-	2 (two) months from PO date
2	After receiving the equipment required, the Technical Committee of the District shall inspect the products and make recommendations within a maximum of 30 days from the date of delivery. Subject to satisfaction of the Technical Committee about the product quality, 70% of the total material cost shall be released.	70%	Within 1 (one) month from date of delivery
3	After delivery, training and demonstration of the safety devices & Equipment 20% payment will be released. In Case of PPE, this 20 % can be released along with 70% payment.	20%	1 month from the date of Training and demonstration in case of safety devices & Mechanical equipment
4	10% payment shall be released within 30 days from completion of Defect Liability period.	10%	1 month after the expiry of Defect Liability period.
5	Performance Guarantee (in the form of Bank Guarantee) of 5% of the value of the contract shall be deposited by the Agency and valid for 1 year to meet the contractual obligations during Defect Liability period (DLP) as well as 6 months warranty beyond DLP.	5%	Performance Guarantee at the time of confirmation of booking the order





