



# KARNATAKA STATE POLICY ON SANITATION AND WASTE MANAGEMENT

**KARNATAKA RURAL DRINKING WATER & SANITATION DEPARTMENT**

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## I. INTRODUCTION AND BACKGROUND

*“Sanitation is more important than political independence”-Mahatma Gandhi*

- 1.1. The practice of open defecation, poor personal hygiene practices and lack of proper treatment of solid and liquid wastes has had a detrimental impact on public health, child mortality, gender equity, environment and economy in rural areas. Specifically, with respect to health, incorrect disposal of solid and liquid waste has resulted in the growth of water borne diseases such as diarrhoea, malaria, dengue, cholera and typhoid. It is estimated that 88% of the total disease burden in rural areas is due to a lack of clean water, sanitation and improper solid and liquid waste management<sup>1</sup>. The health and social impacts are higher on vulnerable and marginalised communities, including children especially those under the age of five, young girls and women.
- 1.2. With the above context, Swachh Bharat Mission was launched on October 02, 2014 to attain the goal of universal sanitation coverage and achieve Swachh Bharat by October 02, 2019, the 150<sup>th</sup> birth anniversary of Mahatma Gandhi. The Swachh Bharat Mission has two sub-missions, Swachh Bharat Mission (Gramin) (“**SBM(G)**”) administered by the Ministry of Drinking Water & Sanitation (MDWS) and the Swachh Bharat Mission (Urban) administered by the Ministry of Housing & Urban Affairs (MoHUA). SBM(G) has the following main objectives:
  - (i) Bring about an improvement in the general quality of life in the rural areas, by promoting cleanliness, hygiene and eliminating open defecation.
  - (ii) Accelerate sanitation coverage in rural areas to achieve the vision of Swachh Bharat by October 02, 2019.
  - (iii) Motivate communities and Panchayat Raj Institutions to adopt sustainable sanitation practices and facilities through awareness creation and health education.
  - (iv) Encourage cost effective and appropriate technologies for ecologically safe and sustainable sanitation.
  - (v) Develop, wherever required, community managed sanitation systems focusing on scientific solid and liquid waste management systems for overall cleanliness in the rural areas.
  - (vi) Create significant positive impact on gender and promote social inclusion by improving sanitation especially in marginalized communities.
- 1.3. Thereafter in 2016, the Ministry of Environment, Forest and Climate Change published the Solid waste Management Rules, 2016 (“**SWM Rules**”) and the Plastic Waste Management Rules, 2016 (“**PWM Rules**”) which laid out specific duties and obligations of the state with respect to management of solid waste including plastic waste generated in rural areas. In addition, as per the 73<sup>rd</sup> amendment of the Constitution of India and Karnataka Gram Swaraj and Panchayat Raj Act, 1993 (“**Karnataka Panchayat Raj Act**”), water and sanitation are primary responsibilities of the Gram Panchayat (“**GP**”) in rural areas. Therefore, the SBM (G) guidelines along with the Karnataka Panchayat Raj Act, SWM

<sup>1</sup>Source Book on Solid and Liquid Waste Management in Rural Areas, Ministry of Drinking Water and Sanitation, Swachh Bharat Mission (Gramin), April 2015 at pp 1.

Rules and PWM Rules form the regulatory framework for provision of sanitation and solid and liquid waste management in rural areas.

## II. PROGRESS IN KARNATAKA

- 2.1. There are 30 Zilla Panchayats, 176 Taluk Panchayats and 6022 GPs in the State of Karnataka. As a first step, the State of Karnataka has focussed on making the GPs open defecation free (ODF). During the baseline survey conducted in 2012-13, there were 45,42,655 households which had no access to toilets. In November 2018, Karnataka state was declared ODF with the construction of the required 45,42,655 toilets. As per the SBM(G) guidelines, after ODF declaration, ODF plus activities such as cleanliness of water sources and public water bodies, decentralised solid and liquid waste management, drains, maintenance of school and Anganwadi toilets, hand-washing and personal hygiene, awareness and training on pit emptying and faecal sludge management etc. should be undertaken. In light of the fact that the state of Karnataka has been declared 100% ODF, it proposes to move towards ODF plus activities where the focus is on total sanitation with inclusion of safe disposal of faecal sludge, personal hygiene practices, treatment of wastewater and scientific solid waste management such that full benefit of sanitation can be enjoyed by the villages.
- 2.2. Under SBM (G) guidelines, states are required to develop an implementation framework to enable execution of the guidelines bearing in mind state specific challenges, requirements and dynamics. As a part of this implementation framework and pursuant to the requirements of SWM Rules and PWM Rules, the state of Karnataka proposes to adopt this state policy for sanitation and waste management in rural areas ("**Karnataka State Rural Sanitation Policy**") which include guiding principles and approach, long term vision, goals and timelines to achieve the goals. In addition to the policy, the state of Karnataka also proposes to prepare and adopt a state strategy for implementing this Karnataka State Rural Sanitation Policy. The state strategy will among others, include guidance on technologies for retrofitting of toilets, solid and liquid waste management, financial resource planning, roles and responsibilities of the different functionaries, information education and communication (IEC) and behaviour change communication (BCC), capacity building, monitoring and evaluation of waste management system.. Furthermore, the model bye-laws to be adopted by the Gram Panchayats will act as the enforcement mechanism for the principles contained in this policy and the state strategy. Therefore, the Karnataka State Rural Sanitation Policy along with the state strategy and model bye-laws will act as a decision-making framework to bring about a significant improvement in the sanitation and waste management infrastructure and processes across the rural areas of the state.
- 2.3. While the primary responsibility of providing sanitation and waste management will remain with the GP at a decentralised level, the government of Karnataka along with appropriate governmental authorities will play a facilitating role in the form of framing policies and regulations, providing viability gap funding, training, technical assistance and other capacity building support to the GPs.
- 2.4. It is clarified that hazardous waste, bio-medical waste, e-waste, construction and demolition waste and industrial waste (solid and liquid components) are not covered by the Karnataka State Rural Sanitation Policy because they are governed by different regulations and administered by authorities that do not fall within the Rural Development & Panchayath Raj Department. In the event the management of such types of waste falls within the purview of the Gram Panchayats due to changes in applicable laws, this Karnataka State Rural Sanitation Policy will be expanded to include the above waste streams.

### III. VISION, AIMS AND OBJECTIVES

#### 3.1. Vision

*To provide safe, affordable, sustainable, inclusive sanitation and waste management services to every individual in rural Karnataka leading to improved public health, cleaner environment and enhanced recovery of resources.*

#### 3.2. Aims and Objectives relating to Solid Waste Management

- (i) Segregation at source and processing of 100% of biodegradable waste should be achieved in 20% of the total number of GPs by March 2020, in 50% of the total number of GPs by March 2021 and 100% of all GPs in the state of Karnataka by March 2022.
- (ii) 100% of the non-biodegradable waste will be reused, recycled or processed with focus on minimising transportation to landfill in 20% of the total number of GPs by March 2020, in 50% of the GPs by March-2021 and in 100% of the GPs by March-2022.
- (iii) Effective implementation of ban on plastic materials issued by Forest, Ecology and Environment Department, Government of Karnataka, in all rural areas within the state.
- (iv) To ensure that no waste is dumped or burnt in open spaces such that the natural environment of the rural areas is protected.
- (v) Convergence of dry waste management between rural and urban areas at taluk or district level by March 2022.
- (vi) To inculcate the 4R approach (i.e. reduce, reuse, recycle and recover) towards waste through intensive information education and communication (IEC) and behaviour change communication (BCC) activities.
- (vii) Reduction in adverse effects of improper solid waste management on environment and health of local populations with improved levels of sanitation in rural areas.

#### 3.3. Aims and Objectives for Sanitation and Liquid Waste Management

- (i) The practice of open defecation shall be eliminated through access to toilets and sustained usage of the facilities through community participation and awareness. This will be achieved by maintaining 100% ODF status in rural Karnataka through construction of new toilets for every new house and/or community toilets with appropriate containment.
- (ii) Improvement in public health and health of sanitation workers through promotion of safe personal and public hygiene practices (including provision of personal protective equipment) and strict adherence to Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013.
- (iii) To ensure that there is no exposure of human faeces to the environment by providing safe

containment, collection, transportation, treatment and disposal. In this regard, the state of Karnataka shall ensure conversion of all the single-pit toilets to twin-pit or any other acceptable safe mode of containment by 2025. In addition, 100% containment and treatment of faecal sludge and greywater in (a) 5% of the GPs will be completed by 2021, (b) 20% of the GPs will be completed by 2022, (c) 35% of the GPs will be completed by 2023, (d) 70% of the GPs by 2024 and (e) 100% of the GPs by 2025.

- (iv) To ensure that there is no contamination of land and water resources by wastewater by providing appropriate and low-cost, minimal maintenance treatment facilities.

#### IV. GUIDING PRINCIPLES FOR THE STATE POLICY

The State of Karnataka will approach sanitation and solid and liquid waste management in rural areas with the following guiding principles:

- 4.1. All residents shall have access to functional individual or community toilets where such toilets shall have water supply and scientifically designed and accessible containment systems.
- 4.2. Safe hand wash, personal hygiene and environmental sanitation shall be practiced by the entire community.
- 4.3. There shall be emphasis on reduction in generation of waste, maximisation of recovery of resources from waste and reduction in the amount of waste being disposed off without processing or treatment.
- 4.4. There will be incremental increase in the provision of solid and liquid waste management services every year with the eventual goal of financial sustainability of such systems.
- 4.5. Collaboration and equitable involvement of all social and economic groups such as elected representatives, community-based groups, health workers, village leaders, Anganwadi and ASHA workers, informal waste pickers, youth groups, marginalised communities, in sanitation and waste management systems.
- 4.6. Collaboration with different government departments and agencies for implementation, operation, funding, monitoring and capacity building of rural sanitation and waste management systems. This includes convergence of appropriate schemes applicable to sanitation in rural areas.
- 4.7. Enhancement of capacities of the departments, officials and Panchayat Raj Institutions involved in sanitation and waste management.
- 4.8. Overall improvement in health of local populations across social and economic groups (especially marginalised and vulnerable groups such as the rural poor, women, Dalits and Adivasis), cleanliness and environment of the rural areas.
- 4.9. Recognition of the contribution made by sanitation workers and the informal sector towards maintenance of sanitation, management of municipal solid waste and recovery of resources.
- 4.10. Sustained and intensive IEC and BCC activities shall be carried out to ensure safe sanitation and waste management practices.

- 4.11. Menstrual hygiene shall be advocated by providing awareness and access to affordable and sustainable sanitary products.
- 4.12. Setting up of robust monitoring and evaluation systems to oversee, course correct and sustain good sanitation and waste management systems in the state.

## V. OVERALL APPROACH TOWARDS WASTE MANAGEMENT

- 5.1. With respect to management of different types of solid and liquid wastes, the below mentioned approach shall be followed:
- (i) While almost 80-85% of the wastewater by volume is greywater<sup>2</sup>, in terms of impact of non-treatment, blackwater<sup>3</sup> is more detrimental to health and environment. Therefore, containment, collection, transportation, treatment and disposal of blackwater will be undertaken by the GPs with support from the state.
  - (ii) With regard to solid waste, the focus of the GPs should be primarily on collection and processing of non-biodegradable (dry) waste given that it poses a bigger concern than biodegradable /wet waste in most villages where biodegradable/wet waste could be composted and/or fed to livestock by the waste generator themselves.
- 5.2. The management of solid and liquid wastes in rural areas shall be based on the following approach:
- (i) The primary responsibility of sanitation and waste management infrastructure and service on a decentralised basis will remain with the Gram Panchayats.
  - (ii) Domestic waste generators shall have the primary responsibility of minimizing their wastes (liquid and solid) and treating it on-site to the extent possible.
  - (iii) With regard to waste treatment/processing solutions, the state of Karnataka shall adopt the following approach:
    - (a) To the extent possible, decentralized solutions should be preferred over centralized ones.
    - (b) Easy to operate technologies with low operational and maintenance cost shall be chosen.
    - (c) Treatment options with better reuse/recycling potential will be selected.
  - (iv) It is critical that waste management systems are self-sustainable over a period of time. The GPs will be mandatorily required to earmark at least 25% of the entire budgets for sanitation and solid and liquid waste management systems. Further, in light with the established principle of "polluter pays", all waste generators should be charged user fees for waste management services on an equitable basis which can be used towards operational expenditures of the SLWM systems.
  - (v) The planning for waste management shall be on the basis of prevalent local conditions such as density of population, geo-climatic conditions etc. and capacities to implement and operate the solution.

<sup>2</sup>Wastewater not containing human excreta, such as household wastewater generated during bathing, cooking and washing activities from the kitchen, bathrooms and include wastewater from commercial establishments and activities such agriculture, dairy and animal rearing.

<sup>3</sup>Wastewater coming from the latrines including human faeces and flush/wash water, either at household level or in commercial establishments, anganwadis, schools, institutions