The policy and practice brief on ‘Basic Services and the Urban Poor Children’ has been published by Youth For Social Development with the purpose of improving physical environment and basic services for the urban poor children which is vital for their physical and mental growth. We do believe this will provide important research and policy inputs to various stakeholders specifically the government, policy makers, service providers and think tanks to improve urban basic services.

Safe, adequate and affordable sanitation specifically the garbage collection and management are essential for the people living in slums specifically for the young children for their physical and mental growth. The sanitation situation and practice in Berhampur has been unhealthy and unsafe due to poor quality of services and weak solid waste management practice. As per the 74th Constitutional Amendment Act sanitation services should be provided by the urban local bodies on a priority basis. To ensure better sanitation services steps should be taken to implement the city sanitation plan and allocate more budget and increase human resources.

Introduction

Berhampur is the third largest city in Odisha with a population of about 355,823 as per the 2011 census. Of this the slum population represents 33%. The city is divided into 40 wards and spread over 37 square kilometers. As of 2011, there are 66,812 households, of which 26,270 are slums households. Population growth and urbanization coupled with inadequate planning, infrastructure facilities have led to severe waste management problems in Berhampur.

Berhampur Municipal Corporation (BMC) is responsible for solid waste management services in the city. The total solid waste generated by the city is estimated to be 160 tons per day. Out of the total quantity of solid waste generated per day, only about 60% is collected and disposed off and 40% remains uncollected. Dumping of solid waste in open grounds and in open channels to dispose is creating chokedage and stagnation problems. Poor solid waste management in the city is characterized by conventional methods of collection, absence of mechanism for 100% coverage for waste collection, lack of capacity of BMC in waste management, poor human resources and low budget provision are among.

Garbage and Children in Slums

Waste that is not properly managed, especially excreta, liquid and solid waste from households, pose serious health hazard and lead to the spread of infectious diseases. Unattended waste lying around attracts flies, rats, and other creatures that in turn spread contagious diseases. Further, the wet waste that decomposes releases a bad odour. This leads to unhygienic conditions and thereby public health problems.

Key Issues in Solid Waste Management

- Disposal and dumping of waste in streets, storm water drains, etc. cause multiple effects like, health hazards and unhygienic environment in Berhampur city, specifically in slum areas.
- The sewage is drained out in the open drains ultimately which goes in the natural drain, open space and water bodies leading to contamination.
- Traditional methods of solid waste management like manual lifting and transportation, unscientific disposal, no door to door collection, no street wise dust bins, lack of treatment of waste lead to inefficient waste management in the city.
- Non operational of door to door garbage collection in all slum areas and the frequency of garbage lifting is very less causes dumping of garbage.
- The waste collection efficiency of BMC remains at a low rate of 56.5%. The per capita waste generation in the city is 390 grams per person (2011 census) and a total of 4,589 tons per day (TPD).
- Inadequacy of staff for street cleaning and low budget provision for solid waste management (450 lakhs of total budget in 2013-14 BE) in BMC budget appears to be a low priority area.

Source: City Development Plan, 2008 and City Sanitation Plan, 2008, Berhampur Municipal Corporation

1 City Development Plan for Berhampur, 2008
The group at risk from the unscientific disposal of solid waste includes - the population in areas where there is no proper waste disposal method, especially the young children; children living in slums, and workers managing solid waste. Other high-risk group includes population living close to a waste dump and those, whose water supply has become contaminated either due to waste dumping or leakage. Uncollected solid waste also increases risk of injury, and infection.

In particular, organic domestic waste pose serious threat, since they ferment, creating conditions favorable to the survival and growth of microbial pathogens. Direct handling of solid waste can result in various types of infectious and chronic diseases among the workers of solid waste with rag pickers being the most vulnerable. Exposure to hazardous waste can affect human health, while children are more vulnerable to such pollutants. Further, direct exposure can lead to diseases through chemical exposure as the release of chemical waste into the environment leads to chemical poisoning.

**Garbage Management in Berhampur**

Berhampur Municipal Corporation is responsible for providing municipal solid waste management services to its citizens including planning, design, construction, operation and maintenance within the municipal limits. Majority of the waste is generated by the households population of the city. The city has a large number of vegetable and fruit markets and commercial establishments that generate a significant quantity of waste.

The responsibility for primary waste collection lies with Berhampur Municipal Corporation. BMC's own staff accomplishes the work in 18 wards. BMC has engaged private contractors on annual basis in 19 wards. Waste segregation at source is not practiced in Berhampur.

All the privatized wards are covered by door-to-door (DTD) waste collection at household level, using tricycles with a capacity to hold 6 bins of 10 liters each. The waste collected from the households is transferred to the designated secondary collection points of the respective wards.

In the remaining 18 wards managed by BMC there is no door-to-door waste collection system and the residents of these wards throw their waste at any convenient point on the road or open drains or in community bins provided by BMC, from where it is collected as part of the municipal street sweeping service. Depositing waste in open drains is also very common in Berhampur. Street sweepers are responsible for not only cleaning roads and footpaths of dirt and silt, but also for collecting waste deposited by commercial establishments and households.

BMC also collects bulk waste from commercial sources such as shops, markets, hotels, restaurants and other business and services from secondary collection points. Vegetable and fruit markets represent the single largest source of waste within the commercial sources. There are 3 types of Secondary Collection Points (SCPs) in the city. These are - 1) 3 MT containers, 2) 9 MT containers and 3) open dumps. Berhampur has twenty 3 MT containers, sixteen 9 MT containers and 27 open dumping points. Depending upon the location and filling status, the containers are lifted daily or every alternate day or once in three days. Facilities are not available to promote direct loading of large bins on transportation vehicles.

**Budget for Solid Waste Management**

As the above graph shows, there is no consistency in the allocation of funds towards Solid Waste Management by the BMC during 2000-2020. However, in the recent times during 2012-13 and 2013-14 allocation towards solid waste management has been increased due to steps taken by BMC to start PPP in solid waste management.

BMC action for solid waste management

- Berhampur Municipal Corporation with the support of Government of Odisha has started an integrated solid waste management system encompassing collection and transportation of municipal solid waste and development, operation and maintenance of a solid waste treatment and disposal facility on a public-private partnership basis.
For this BMC has allocated an amount of 450 lakhs in 2013-14 for solid waste management through public-private partnership mode.

**Immediate Attention**

Ensuring access to safe, affordable, acceptable and sufficient sanitation facilities is a prime need to enhance quality of life for the poor in urban slums. Berhampur Municipal Corporation should immediately act on the City Sanitation Plan which has been prepared following the Odisha Urban Sanitation Strategy (OUSS) on the lines of, National Urban Sanitation Policy (NUSP) to ensure efficient management of solid waste in the city.

- Ensure 100% door to door waste collection system in all slums and non-slum households covering 40 wards in Berhampur Municipal Corporation.
- Prohibition of dumping of garbage on roads side and open spaces and immediate transportation of the same to the disposal site.
- Immediate provision of dust bin in all areas (slums and non-slum) with facilities to segregate waste at source.
- Ensure child friendly provision in solid waste management under city sanitation plan and implement in its full spirit by engaging children in planning and designing.
- Scientific management of solid waste with proper segregation, collection, transportation, processing and disposal to minimize contamination of soil and water from solid waste.
- Preparation of Action Plan for Solid Waste Management under City Sanitation Programme for the city.
- Awareness and motivation campaigns with effective IEC materials and group discussions at the community level must be given priority to get support from the community for effective management of solid waste.
- Make adequate budget provision and engage private sector and improve human resource capacity to manage the future waste quantity.
- Develop an environment friendly sustainable and economically feasible solid waste management system to protect public health and environment from hazardous effect of solid waste.
- Create ward wise solid waste monitoring groups consisting of community members and citizens.
- Promote alternatives to utilise solid waste for power generation and recycling.
- Create awareness among general public about solid waste management in general and segregation of waste in particular. Such awareness campaign need to be initiated at the school level.
Dumped Garbage in Slums in Berhampur City

Dhanamera Street

Ambapua

Hanuman Nagar

Phulasundari Street

Pichpicha Nagar

Haridakhandi

Research:
Mr. Ratneswar Sahu, Project Manager, Youth for Social Development

Research Inputs:
Mr. Bibhu Prasad Sahu, Secretary, Youth for Social Development

Mentor:
Dr. Srikant Patibandla, Member, Youth for Social Development

Published by

Supported by

YOUTH FOR SOCIAL DEVELOPMENT
Inform Enable Engage
6th Medical Bank Colony, Barpali Nagar,
BERHAMPUR - 760004, Ganjam, Odisha, INDIA
Tel. : +91 - 680 - 3205466/2283398, E-mail : info@ysdindia.org


November 2013