



**Nomination Award Theme** : Sanitation (Solid Waste Management)

**Nomination Entry Title** : Innovative Practices of Solid Waste Management  
in Namli Town

**HUDCO BEST PRACTICES AWARDS - 2013-14**

Submitted by: Urban Administration and Development Department, GoMP  
&  
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## ***"CLEAN AND GREEN NAMLI"***

*Alternative approaches to municipal solid waste (MSW) management through community participation and public private partnership can make towns clean and green.*

### **Summary:**

NAMLI is a small town of Ratlam district of Madhya Pradesh. Similar to the other towns of Madhya Pradesh door-to-door collection of garbage, safe/ hygienic and efficient transportation of solid waste were not practiced by the Nagar Parishad Namli.

The Municipality with a strong commitment decided to make the town clean and green. Also, it was decided to initiate waste collection/management and transportation activities to comply with the Municipal Solid Waste Management (SWM) and Handling Rules 2000.

One of the major hurdle was lack of financial resources and technical capacity of the ULB. To solve this issue, partnership with private sector was a must. The responsibility of management of the complete process was shared by the ULB with an NGO -Indian Gramin Services, Indore.

The solid waste infrastructure is upgraded and door to door collection of waste is being done. The collected waste is then transported to trenching ground located where segregation of waste is being done. The segregated waste is then treated in the plant located at the trenching ground giving the organic manure as the final product.

This practice has recuperated the living standard of the citizen and the city has become more hygienic and clean place to live. The city has become the dustbin free city and the final product(organic manure and bricks) of the treated waste add to the revenue of the ULB.

### **Narrative**

#### **ESTABLISHMENT OF PRIORITIES**

The process was initiated in the year 2011 by the Nagar Parishad Namli and the objective set was to achieve the status of :

## ***"CLEAN AND GREEN NAMLI"***

The major goal of the best practice is to comply with the Solid Waste Management and Handling Rules 2000 and to improve sanitary conditions to provide clean environment to the citizens of the town. Other goals include improvement of hygiene, segregated/ door to door collection of garbage, timely collection of waste, segregation of collected waste and treating of waste collected at the trenching ground and finally earning the revenue out of it. The treatment process includes conversion of waste to organic manure and plastic (and polyethene) to bricks respectively.

## Objective and Strategies:

The main objective and strategies under the project included:

- Provision of adequate machinery, equipments and staff for the project.
- Up gradation of existing SWM infrastructure.
- Door to door collection of municipal solid waste.
- Segregation of waste at source.
- Collection and transportation of waste from residential areas and markets. Vehicles have alarm system for house to house collection.
- Primary and secondary storage in bins. Public awareness for better sanitation/waste management.
- Treatment of the segregated waste and converting in to the organic manure and the plastic bricks.

## Situation Prior to the initiative

Namli is a small town with an area of about 9 sq km and population of 9756 as per 2011 census figures. The municipal area is divided into 15 wards for civic administration. Namli is important town of the area and also the center of social, political and other commercial activities for the surrounding areas.

There was no door-to-door collection of waste and heaps of garbage were seen in most of the localities before the implementation of the programme. The sanitary conditions were very poor due to lack of unorganized system of collection and transportation. The collection points were not earmarked and there were inadequate dustbins and collection machinery. The throwing of garbage in open areas was a common practice. It used to create unhygienic and dirty environment in the streets, localities, markets and open areas.



The financial position of the ULB was not strong enough to procure machinery and deploy manpower for waste management. Thus, issues prior to initiative can be summarised as:

1. Lack of solid waste management
2. Lack of Municipal sanitary staff
3. Lack of machinery and equipments available with the ULB
4. Lack of awareness among the citizens
5. Lack of waste treatment measures

## Process

### Awareness generation

The major goal of the best practice is to comply with the Solid Waste Management and Handling Rules 2000 and to improve sanitary conditions to provide a clean environment to the citizens of the city. It was well understood that without community participation, waste management initiatives would not achieve success. Before this, camps and public awareness workshops were also organized for making people aware and for promoting them to give waste to the bicycle-rickshaw governed by the Nagar Parishad.



### Door to Door collection

The practice was initiated with the trial of sending two bicycle-rickshaws into various wards for door to door collection of waste.

On seeing the success of the initiative taken, ULB distributed approx. 3,500 dustbins to the citizens. The aim of this initiative was to make people responsible for this new approach which was at some level achieved.

Seeing the success of the project the ULB started sending the new garbage vehicle (tata magic) to the various wards of the city. These vehicles are equipped with siren, which makes people alert and compels them to come to their doorstep for giving garbage.

### Segregation of waste

The vehicles are covered and divided into two parts for segregation of the waste for dry and silt separately.

The door to door collection of waste is done twice a day. The dustbin placed at the secondary location has been removed, which made the city dustbin free and more hygienic and clean. The segregated waste collected is transported to the trenching ground for processing. Three collection points have been identified by the Nagar Parishad officials. Plant for conversion of segregated waste into Organic manure has been commissioned in the trenching ground.

### Mobilization of resources

Nagar Parishad Namli has given contract to an NGO- Indian Gramin Services, Indore for assistance in the whole process of SWM. The segregation of the waste is done at the trenching ground by the IGS( Indian Gramin Services) team. The conversion of waste to manure is being done by the experts of NGO. Nagar Parishad is paying Rs. 35000/- month to the IGS for this contract.



## RESULTS ACHIEVED

### REUSE AND RECYCLING

The plant for converting the waste collected to organic manure has been commissioned with the help of Indian Gramin Services, Indore (NGO). Currently the conversion of wet organic waste to manure has been started and production of 5 tons of bio-degradable manure has already been done. Sale of the same is in process. This practice will also increase the income of the ULB. The plant for conversion of Plastic and polythene into bricks is also under consideration, the bricks produced can be used in construction work.

### Outcome:

- Improved door to door collection of municipal solid waste.
- Efficient, hygienically safe transportation of waste to the landfill site.
- Improvement in the environmental conditions in the city.
- Negligible littering in the streets due to awareness of the citizens, timely and effective collection of waste from the source and its regular transportation. Unemployed drivers/ sanitary workers employed by the Contractor for sanitation. Greater awareness among citizens about cleanliness/ waste management.
- The segregation of waste and converting waste to organic manure and other product.
- Revenue generation of the Nagar Parishad has increased.

### Achievement/results:

- Namali has become one of the pioneer city in Madhya Pradesh to have arrangements for 100% DTDC and disposal of waste in scientific manner.

- Namli has been able to recover a portion of its expenditure incurred in solid waste management from the revenue that it gains on the sale of compost.
- As the city waste is now converted into compost, pressure on the trenching ground has considerably decreased.

### **Lesson learned:**

Namli set up a compost plant for processing of solid waste. This project is helping to process the waste and provide income to the Municipality and making the city dustbin free.

Strong commitment and determination of the ULBs can make significant differences in the overall service delivery. This model can be adopted by ULBs having similar population. Bigger towns can replicate the same by zonewise implementation.

### **Sustainability**

- The plant is managed by a private agency that saves municipality's expenditure on operation and maintenance of the plant. For compost management the municipality has to pay only Rs.35000 per month to the IGS. The income which is earned by the selling of the manure and brick helps the municipality financially.
- By selling the organic manure produced and the bricks will add to the revenue of the Nagar Parishad .
- The city has achieved the status of the dustbin free city and clean city.
- This practice has also reduced the impact on the environment.

### **Transferability:**

Nagar Parishad, Namli with the population of 9,756 and with area of 9 sq.km by engaging the private partner, IGS and through proper management has recuperated the city hygiene and has also added to the revenue of the Nagar parishad. The city has become dustbin free at a minimal cost. If this practice is adopted by other 210 small (pop less than 25000) Nagar Parishads, the major part of state will become dustbin free and more clean and hygienic. Further to this, the revenue of the Nagar Parishad will also increase which can be used by the Nagar Parishad for other development purpose.

### **References:**

- City development plan, Namli.
- Nagar Parishad Namli.