

**Yashwantrao Chavan Academy of Development Administration,
Pune**

**Advanced Post Graduate Diploma in Urban Management
(APGDUM)**

**Analysis of “Zero Garbage Prabhag”
Project in Pune Municipal Corporation**

**By
*Wagh Jitendra***

**Guide
Dr. Kiran Kulkarni
Director, Janwani, Pune**

10 April 2015

Critical Analysis of “Zero Garbage Prabhag” Project in Pune Municipal Corporation

**A project report submitted in partial fulfillment of the
requirements**

**For the degree of Advanced Post Graduate Diploma in
Urban Management (APGDUM)**

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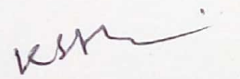
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EVALUATION CERTIFICATE

Certified that the work incorporated in the dissertation entitled **Critical Analysis of "Zero Garbage Prabhag" Project in Pune Municipal Corporation** Submitted by **Wagh Jitendra** was carried out under **Dr. Kiran Kulkarni**. Such material as obtained from other sources has been duly acknowledged in the dissertation.

Date: 10 April, 2015
YASHADA, Pune



Dr. Kiran Kulkarni
Director, Janwani, Pune

DECLARATION

I hereby declare that this dissertation/ Project Report titled **Critical Analysis of “Zero Garbage Prabhag” Project in Pune Municipal Corporation** submitted by me is based on actual work carried out by me under the guidance and supervision of Dr. Kiran Kulkarni. Any reference to work done by any other person or institution or any material obtained from other sources have been duly cited and referenced. It is further to state that this work is not submitted anywhere else for any examination.

Date : 10 April, 2015
YASHADA, Pune

Jitendra Wagh

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Executive Summary

Solid waste management is one of the major challenges faced by many countries around the globe as well as almost all the urban local bodies in country. The management of solid waste typically involves its collection, transport, processing and recycling & disposal.

Methods of waste reduction, waste reuse and recycling are the preferred options while managing waste. To achieve waste reuse & recycling, segregation at source & door to door collection of the solid waste are of the prime importance.

Different urban local bodies in India are coming up with innovative solution to this chronic problem. This is an attempt to study one of such innovative experiment being undertaken by Pune Municipal Corporation (PMC) with the help of Janwani. The project is named as "Zero Garbage Prabhag" Project.

The principle applied in the project is very simple & reads as follows:

"Both organic and inorganic waste is segregated. Organic material is used in the biogas plant, thus eliminating its transportation cost to the landfill. Inorganic material, such as plastics and glass, is sold as scrap. The ultimate goal of the Zero Garbage Project is to process all waste at the ward level, reducing transportation and labor costs for the city and eliminating the need for landfill sites"

The project was implemented in 20 Prabhags of PMC. Once it was decided to study the impact of the said project key performance indicators were identified as listed below:

- Extent of Door to Door collection of the waste
- Extent of segregation of the waste
- Extent of recovery of waste
- No. of Community container
- No of Societies having In situ processing of wet waste

The data was collected from different sources (basically secondary data) & same was analysed. The conclusions are as follows:

- At the end of the project the achievements for the segregation at source & door to door collection indicators are 70% & 85%. Over a period of one year the rise in percentage of properties with segregation at source is 43% & door to door collection percentage increased by 37.6% in the same period.
- Number of community container are reduced from 265 to 105 i.e. fall of 150 container is reported.
- Number of societies, number of properties & wet waste processed at the society level has almost doubled during the project term. Though it has doubled, the absolute numbers achieved are not so impressive hence there is scope for improvement.
- During the project period, the amount of waste recycled within prabhag reached to 18.7% of total waste. More recycling is possible with support of PMC i.e. increasing the decentralized processing units
- The rise in the indicators over a project period for slum area is as good as non-slum area. Hence implementation has been good in slum area too.
- There is scope to improve the statistics for slum area with respect to community container & increasing public awareness.
- It is concluded that prabhag number 9, 21, 36 are the prabhags which performed better than the average of all the prabhags in 5 out of 7 key performance indicators.
- With minor procedural amendments the project can easily be replicated not only across all the prabhag of the city but also in different cities across the state.
- The total annual financial gain expected out of three components viz. cost saved on transportation & processing, social profit of the project and value of energy recovered estimated to be **Rs. 1875 Lakh per annum.**

Ultimately it has been concluded that the hypothesis of the dissertation i.e. **“The “Zero Garbage Project” in Pune Municipal Corporation has proved an effective solution to the problem of urban solid waste management”** is substantially verified.