

# To Study Utilization of Nirmalya from Temple in Pune District

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**Abstract** - Pune is a religious district, People worship deities, daily visit temple, offers nirmalya to deities, after sometime the nirmalya become unused and the Asian Jal-Pravah method is used for disposal of nirmalya. The effective utilization & disposal of nirmalya is absent at many Temples in Pune district. when people carry nirmalya with them, it is in plastic bag or in inorganic matter after offering nirmalya to deities people throw that bag in temple surrounding area so it create pollution in temple area. In this paper, we study utilization & disposal of nirmalya from temple in Pune District. Finding the alternative to "Asian Jal Pravah" method & implement the "green temple" & "zero waste management" concepts in temple.

**Key Words:** Nirmalya Utilization, Disposal, Pollution Control, Zero Waste, Green Temple, etc.

## 1. INTRODUCTION

Pune is situated in Maharashtra state of India, considered to be the oldest living city of India is one of the most religious city of India because of the diverse type of temple located in the city being situated at the bank of river its periphery is outlined by number of temples & Ghats. People worship god, daily visit temple, and offers nirmalya to God, after sometime or after one day the nirmalya become unused, as we all know nirmalya is the sensitive part of our society so we have to dispose it carefully. The Asian Jal-Pravah method is used for disposal of nirmalya. The effective utilization & disposal of nirmalya is absent at many Temples in Pune district.

when people carry nirmalya with them in temple, it is in plastic bag or in inorganic matter after offering nirmalya to god people throw that bag in temple surrounding area or bank or river so it create pollution in temple area. Some people carry food & water with them in temple after offering nirmalya to god, people

do lunch in temple area after lunch the remaining matter & the food carrying inorganic matter throw in temple area even the water bottle also so it create pollution. In this project we study the utilization & Disposal of unused nirmalya & disposal of inorganic matter from temple in Pune district by more effective method than existing method. Finding the alternative to "Asian Jal Pravah" method & implement the "green temple" & "zero waste management" concepts in temple.

## 2. LITERATURE REVIEW

Literature review related to the utilization of nirmalya from temple was carried out. The objective was to know the existing utilization & disposal method in temples. It was noticed that many researchers, engineers and consultants have worked extensively on utilization & disposal methods of nirmalya.

### 2.1 COLLECTION OF DATA

1. Zeeda, F. M., Idris N., Baharuddin A., Muhammad A., and Sulaiman N., (2012). "The role of religious community in recycling: Empirical insights from Malaysia." *Journal of Resources, Conservation and Recycling*, 58 (2012), 143-151.

"This journal represents the role of religious communities in recycling in malaysia. The author of this journal take a good look at systematic operations of recycling programmes and its long term execution, conductive and unique institutional structure for recycling and community outreach etc. They also conduct features of recycling activities conducted by religious activities."

2. Jadhav. A. R., Chitanand M. P., and Shete H. G., (2013). "Flower Waste Degradation Using Microbial Consortium." *Journal of Flower Waste Degradation Using Microbial Consortium*, 1(3), 1-4.

"This journal represent flower waste degradation using microbial consortium, take results like effect of microbial consortium on flower waste degradation, effect of biofertilizer on plant growth etc. Hence they concluded that microbial consortium helped in reducing the time required for degrading large amount of flower waste to prepare good quality bio manure without causing any harm to environment."

3. Singh, A., Jain A., Sarma B., Abhilash P., and Singh H., (2013). "Solid waste management of temple floral offerings by vermicomposting using *Eisenia fetida*." *Journal of Waste Management*, 33 (2013), 1113–1118.

"This journal represents compost analysis, germination tests, Vc-water extract test, statistical analysis for the vermicomposting. They also take results like seed germination in vc-water extract, physico chemical properties of mature vc's, % of plant growth promotions. Hence the author of the journal concluded that temple waste(tw) vc stimulates seed germination and seedling growth and plant growth promoter better at low concentration as compared to kitchen waste(kw)."

4. Yadav, I., Juneja S., and Chauhan S., (2015). " Temple Waste Utilization and Management: A Review." *Journal of International Journal of Engineering Technology Science and Research*, 2(1), 14-19.

"This journal represent the temple waste utilization and management. number of existing method used in utilization of temple management. Such as a utilization of coconut Shell's, Utilization of Flower waste, Extraction of Dyes and Essential Oils. The last end of the all process then it was concluded the exhaustive review of various methods of utilizing temple waste for one or the other useful product like vermicompost, biogas, dyes, incense sticks, concrete aggregate replacement."

5. Kohli R., and Hussain M., (2016). " Management of Flower Waste by Vermicomposting". *Journal of International Conference on Global Trends in Engineering, Technology and Management, (ICGTETM-2016)* 34-38.

"This journal represents management of flower waste by vermicomposting in indore city. The author decided to add cow dung with flower waster for vermicomposting by using *Eudrilus euganiae* earth worms. The author selects portable HDPE vermi beds and good selection of area for vermicomposting. They also takes results like ph value, electrical conductivity, C-N ratio and do the cost estimation. Hence they concluded that earthworms doesn't required soil for habitation and HDPE vermibed is cheap to use."

6. Nisha Jain, (2016). "Waste Management of Temple Floral offerings by Vermicomposting and its effect on Soil and Plant Growth". *Journal of International Journal of Environmental & Agriculture Research ISSN:[2454-1850] [Vol-2, Issue-7, July-2016*.

"This journal represent the management of Temple Floral offerings by Vermicomposting and its effect on Soil and Plant Growth. In this journal are concluded by this is not only increases the plant growth (as seen in tomato plant) and productivity by nutrient supply but also is cost effective and pollution free. thus vermicompost technology can be successfully applied in temples as a solid waste management strategy with flower as the major organic waste."

7. Aakanksha Mahindrakar, (2017). "Floral Waste Utilization- A Review". *Journal of Int. J. Pure App. Biosci.* 6 (2): 325-329.

"This journal represents a review of flower waste utilization. The author of this journal suggests the techniques like vermicomposting, composting, dyes extraction, extraction of essential oils, making of holi colours, biogas generation etc. and to make incense sticks by using flowers. Author also suggest "green temple" concept under govt. policy. Hence the author concluded that flower waste can not be disposed safely to environment but it can also be utilized by using above techniques".

8. Samadhiya, H., Gupta R. B., and Agrawal O. P., (2017). "Disposal and management of temple waste: Current status and possibility of vermicomposting." *Journal of International Journal of Advanced Research and Development*, 2(4), 359-366.

"This journal represent the disposal and management of temple waste current status and possibility of vermicomposting. it can be concluded that in Set-I, one part of temple waste and one part of dung (1:1) are highly suitable combination for *Eudrilus eugeniae*, In Set-II four part of dung and one part of temple waste (4:1) are highly suitable combination for *eugeniae* and Set-III one part of temple waste and one part of dung (1:1) with (0.125%) of *Tricoderma harzianum* are highly suitable combination for *Eudrilus eugeniae*."

9. Singh P., Borthakar A., Singh R., Awasthi Sh., Pal D. B., Shrivastva P., Tiwary D., Mishra P. K., (2017). "Utilization of temple floral waste for extraction of valuable products: A close loop approach towards environmental sustainability and waste management". *Journal of Pollution*, 3(1): 39-45.

"This journal represents utilization of temple floral waste for extraction of valuable products. These wastes were used to dye various fabrics such as cotton, silk, wool in dye extraction. The author of this journal takes process of collection of waste water- washing and drying- crushing- extraction of dyes-dyeing of fabrics etc. The author also concludes that the remaining waste also used for composting and temple waste with kitchen waste can be suitable for biogas and suggest idea to make synthetic bio char by pyrolysis process."

10. Yadav I. Singh S., Juneja S., Chauhan S., (2018). "Quantification of the Temple Waste of Jaipur City". *Journal of Recent Trends in Agriculture*, ISBN: 978-93-85822-64-3.

"This journal represent the quantification of the temple waste of Jaipur city. The amount of waste generated from temples increases up to ten folds during festivals and other special occasions. As this proportion of waste is organic, therefore it can be utilized in making of some useful products like handmade paper, vermicomposting, holi colors, incense sticks, etc. in

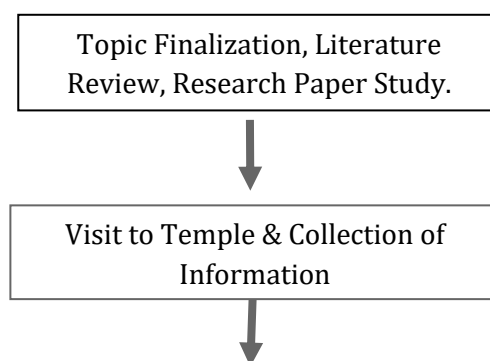
temples. The product manufactured can eventually generate additional revenues for sustainably managed temples".

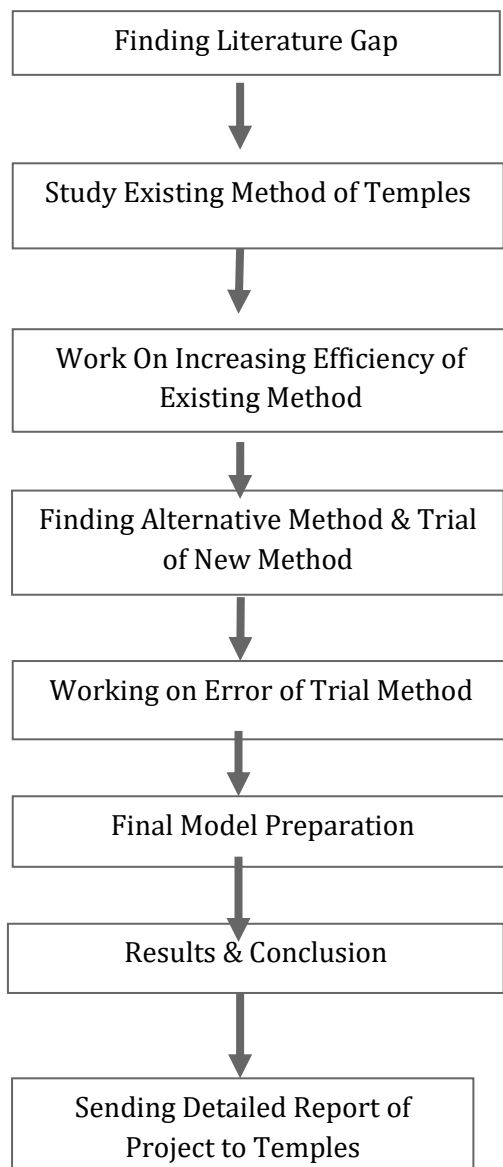
### 3. METHODOLOGY

In this project we are studying the nirmalya management system of temple. First of all we have to do the survey, the present nirmalya management system of temple in Pune district. we have to select the temple for work then visit the temple meet their people, pujari & trust members to know about the nirmalya generation. We have to collect the data like quantity of nirmalya generation, mainly which type of nirmalya is generate in the temple, what they can do for the nirmalya management, problem face by them. We have to collect all the detail information about nirmalya management of temple in Pune district.

After collection of data we can analysis of data according to different temple. Study their existing methods of utilization & disposal actually on site Checking the efficiency of exiting method finding the way to increase the efficiency of that method or finding better alternative method for utilization. Trial of new alternative method, for actual planning & working of that method, Checking suitability of that method for particular temple. Some Methods are better alternative to Asian jal Pravah method is incense sticks, organic fertilizer. After all trial analysis we suggest the suitable method of nirmalya utilization to that Temple.

#### 3.1 Work Plan





#### 4. CONCLUDING REMARK

After reviewing whole literature it was seen that extensive Research has been carried out for utilization & disposal of nirmalya but it is on paper only not implemented in actual or if implemented it is limited to that particular area or temple only, so we have to aware people about this methods. The huge amount unused flowers dispose of in river daily Hence it is mandatory to find alternative for Asian " jal pravah " method and provide a suitable method of utilization & disposal of nirmalya for temple.

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