

## “Utilization & Disposal of Nirmalya by Effective Methods”

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**Abstract** - The effective utilization & disposal of nirmalya is absent at many Temples in Pune district. 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. 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. 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.

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

### 1. INTRODUCTION

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. 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. 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.

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. . 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.

### 2. METHODOLOGY

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. we have to select the temple for work then visit the temple meet their people, pujari & trust members to know about the nirmalya generation. First of all we have to do the survey, the present nirmalya management system of temple in Pune district.

#### 2.1 We visited temple and collect information are as follows :

##### 2.1.1 Temple No 1

1) The leaves of plant is segregated and transfer to **gaushala** for Cows.

2) other nirmalya is handover to **NMC** for organic fertilizer process.

3) coconuts is sell in **market**.

##### 2.1.2 Temple No 2

1) All the nirmalya is handover to Dehu Grampanchayat and **open Dumped**.

2) Nirmalya is **not treated**.

### 2.1.3 Temple No 3

1) All nirmalya of temple is **utilized** as organic **fertilizer** from 2019

### 2.2 Trial Of Methods

After study of all parameters and temple existing methods we found that the nirmalya is not utilized in a planed manner. So we find alternative methods to existing method and that is Dhupbatti preparation and organic fertilizer. This two method is not adopted in Pune district temple any where so we work on it taking trial and successfully complete the trial of this methods.

#### 2.2.1 Incense Sticks ( Dhupbatti ) :

Step 1 : **Collection** of Nirmalya

Step 2 : **Segregation** Of Nirmalya

Step 3 : **Breaking** the Marigold Flowers & Separate the Petals  
 Step 4 : Putting the **separated** petals in sunlight for **drying** upto petals completely Dried

Step 5 : After completely **drying** do the **powder** of that petals with the help of mixture

Step 6 : Then **Sieve** the powder & the **excess part** is used for organic fertilizer

Step 7 : Take some amount of **Ral** for helping in **burning**

Step 8 : **Mix** the powder of petals & Ral

Step 9 : Add some **water** & mix the powder, prepare the **proper mixture** for Dhupbatti

Step 10 : Prepare the **desire shape** of Dhupbatti of that mixture with the help of mould & remover

Step 11 : Keep it for **drying** for 1 day

Step 12 : After completely drying **use** it.

Hence We successfully completed this Trial of dhupbatti preparation from marigold flowers.



Figure 1: Showing Segregation Of Nirmalya



Figure 2 : Showing Mixing Process



Figure 3 : Showing Preparation Process.



Figure 4 : Showing Preparation Of Dhupbatti

### 2.2.2 Disposal Method :

Step 1 : **Collection** of Nirmalya

Step 2 : **Segregation** Of Nirmalya

Step 3 : Take a **bucket or pot** with holes at bottom for passage of water, lay one layer of any tree leaves at bottom.

Step 4 : Lay first layer of **soil** on it

Step 5 : On that first layer of soil lay first **layer of nirmalya** collected

Step 6 : Lay second of **soil** on it

Step 7 : Lay second layer of **nirmalya** on it.

Step 8 : Lay last layer of **soil** on it & hence it is ready

Step 9 : **Watering** the bucket. Step 10 : continue the watering process for 45 days,

Take the observation of specimen after 30 days & 45 days, How that nirmalya decompose and convert into organic fertilizer



Figure 7 : Showing Disposal Process.



Figure 8 : Showing Setup For Disposal



Figure 5 : Showing Digging Process.



Figure 6 : Showing Digging Process

## 3. RESULT & DISCUSSION

### 3.1 Results For Dhupbatti :

#### 3.1.1 Dhupbatti Trial No 1 :

We are successfully talking trial no 1 with expected results

- 1) The petals of flower is dried in expected time of 3 days in sunlight
- 2) we obtain fine powder of dried petals of flower as we expected
- 3) prepared dhupbatti dried in one day in sunlight

#### 3.1.2 Errors In First Trial :

- 1) Strength / durability
- 2) fragrance / smell
- 3) unfinish surface / uneven surfaces

### 3.1.3 Remedial Measures to Overcome Errors :

- 1) Adding Maida lakdi churn for strength and durability
- 2) Adding natural oil extract from flowers for fragrance
- 3) Increase water content for even and finish surface.

### 3.1.4 Dupbatti Trial No 2

After considering all the parameter and error from trial 1 we find some remedial measure and we apply it. We get positive results from this and finally we prepare a desired shape dhupbatti.



**Figure 9 :** Showing Prepared Dhupbatti.



**Figure 10 :** Showing Burning Dhupbatti

### 3.2 Results For Organic Fertilizer :

#### 3.2.1 Observation No 1 :

After 30 days we observe that

- 1) The material color changes to dark grey.
- 2) It indicate that the decomposition of the nirmalya is in process



**Figure 11 :** Showing Nirmalya After 30 days.



**Figure 12 :** Showing Decomposition

#### 3.2.2 Observation No 2 :

After 45 days we observe that

- 1) The nirmalya is totally decomposed, all nirmalya is turn into powder form
- 2) presence of earthworms this indicate that the nirmalya is suitable for farm or planting tress as a fertilizer

Hence we decompose the nirmalya instead of offering it to river. So we can use the decompose nirmalya as a fertilizer also.



Figure 13 : Showing Nirmalya After 45 Days.



Figure 14 : Showing Presence Of Earthworm

#### 4. CONCLUSIONS

- 1) As we study the present nirmalya management of temple, the effective nirmalya management is the need & requirement of temple in pune.
- 2) This study will propose an alternative approach to Nirmalya management & open dumping.
- 3) Nirmalya utilization would eventually be beneficial to the society as people would get to live in a cleaner and a healthier environment.

4) It is exhaustive review for people for adopting various methods of utilizing temple nirmalya for one or the other useful product like vermicompost, biogas, dyes, incense sticks, concrete aggregate replacement etc.

5) Suggest that the temple nirmslya can not only be disposed safely in an environmental friendly manner but can also be utilized for making diversified products.

6) If the temple use this methods of utilization, it generate additional revenues for temples.

7)The green temple concept can prove to be helpful in Government policy formulation for nirmalya management..

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