

# Eco-friendly Ganesh festival celebration in Latur city: A sustainable Approach

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## Abstract

Drought is one of the most severe disasters faced by the Latur region quite frequently. The recent 2016 drought resulted in severe water scarcity in Latur city. The administration has to bring water by railway wagon from Miraj and supply to households through tankers for almost two months. The situation didn't improve even in 2019 due to insufficient rainfall in the following years. Every single drop of water was crucial for the city and celebrating Ganesh festival during this crisis situation without imposing restrictions on people was the biggest challenge in front of the district administration. All water sources used for Lord Ganesha idol immersion were dried and refilling them was not a feasible option. Therefore, the administration came up with a unique idea of reuse of idols and got an outstanding response from citizens. The program was implemented with public participation and not by making any compulsions. More than 28,000 small idols from citizens and 300 big idols from Ganesh Mandals were collected and in return were given appreciation certificates. Not a single idol was damaged as all possible precautions were taken while collecting and inventorying idols. These idols were given to artists of Wadwal village for reuse on the condition that next year donors can collect from them with minimum charges. This activity not only saved water but also inculcated environmentally friendly practices among people.

**Keywords:** Eco-friendly, Ganesh festival, Drought management.

## Introduction

An increasing number of devotees have switched to celebrating the extremely popular Maharashtrian festival of Ganesh Chathurti in an eco-friendly manner. However, it still leaves out a large population that remains wary of the environmental harms they cause. This in turn has, over the last few years, led to the severe damage of the ecological balance of the city's coastline<sup>1</sup>. It has been observed that in recent times, a majority of people seem to have forgotten the ideal rationale behind the celebration of the festivals and the extravagant celebrations are leading to create several environmental problems<sup>2</sup>. Every year the residents of the Latur district and the city in specific celebrate the Ganesh festival with much fanfare and devotion. Almost, every Hindu resident in Maharashtra normally installs a Ganesh idol during the festive season. Similarly, every ward and every society also install a huge Ganesh idol in their areas. This ritual and custom of offering prayers to Lord Ganesh has been followed from the last 100 years or so. Every year during Latur Ganesh festival, the district administration mainly comprising the District Collectorate, the Municipal Corporation and the Police Administration are supposed to be look after the entire arrangements right from Law and Order, peace keeping, the immersion of idols and the arrangements for water availability for such a momentous task. More than 28,000 idols are sold out during the festival season and more than 300 Ganesh pandal associations install their idols in main chowks and societies in the city premises of Latur.

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**Table no.1: Past Five year rainfall details of Latur district**

Sr No	Taluka	Average Rainfall (mm)	Actual Rainfall (mm)				
			2015	2016	2017	2018	2019
1	Latur	714.0	400.8	1008.2	750.2	408.4	600.8
2	Ausa	813.1	375.4	979.0	702.4	453.9	565.9
3	Nilanga	712.4	474.3	1165.3	746.1	537.4	702.7
4	Udgir	880.8	316.7	1096.5	632.0	463.4	678.7
5	Ahmadpur	833.4	320.6	1106.5	791.1	545.6	965.0
6	Chakur	834.8	387.0	1214.5	826.0	646.8	750.4
7	Renapur	714.0	502.0	1166.9	935.0	498.7	704.3
8	Jalkot	902.8	406.5	1052.0	705.5	506.5	1025.0
9	Shirur (A)	712.4	406.9	1245.9	769.6	583.3	607.6
10	Deoni	912.8	544.2	1073.9	870.3	507.8	644.4

(Source: District administration Latur, [www.latur.gov.in](http://www.latur.gov.in))**Review of Literature**

The above table containing the past five year rainfall analysis of the Latur district shows the severity of water scarcity in the Latur city and the adjoining areas. In such scenario, the water conservation and the management of water became utmost important. In the year 2016, Marathwada was facing severe drought and almost negligible rainfall, three major dams went completely dry leaving the city to provide potable water through Indian Railways train, carrying water from Miraj in Sangli district 400 kms away to Latur city. Latur became synonymous with first water train in Maharashtra, even probably in India. Water was supplied by train for four months from April to July 2016 with a capacity of 2.5 MLD distribution per day<sup>3</sup>. In spite of good rainfall in 2016, the Latur City Municipal Corporation was facing acute shortage of water and drought like situation for the years 2017, 2018 and 2019. Considering the monsoon of the year 2019, the Manjra dam had only 2.5 mm<sup>3</sup> of water against the capacity of 244 mm<sup>3</sup>, that is below the dead storage. It can be clearly concluded that every drop of water was very precious for the Latur City Municipal Corporation. In such a scenario, making the water availability for Ganesh idol immersions for 10 days of the festive season was a huge challenge for the District as well as the Municipal Administration.

**Background Of Latur City**

Latur is an important city in the Marathwada region of Maharashtra which is a Centre of education, industry and business establishments. According to the 2011 census, the population of Latur city was 3,82,000. The present population of the city is more than 5.5 lakh and rapidly ever-increasing. Due to the availability of good education institutions in the city, population is ever increasing thereby creating an increasing demand for water supply. The industries, business, commercial establishments in the areas like MIDC, Ganj Golai and the expanding outskirts of the city further accelerating the demand for water. The average annual rainfall of entire Latur district is about 800 mm per year. Latur city mainly falls under the drought prone area. The rivers, reservoirs and dams catering the water demands of the city are completely dependent on rain water. The rivers like Manjara, Terna, Tawaraja, Gharni etc. flow through Latur district. However, none of these rivers are perennial. The monsoon rain is usually late in Latur district. Looking at the past history of Latur, the district always has to deal with the problem of the water scarcity and drought. In the past, Latur region was known for the 1993 Killari earthquake; still this region is experiencing minor tremors after regular intervals. But in recent times it is known for frequent drought conditions and water scarcity. Drought 2016 has changed regional disaster management priorities, geographic and socio-economic conditions and forced policy makers to think differently which will have a long-term impact on the regional environment<sup>4</sup>.

**Objectives**

1. To study issues related to Ganesh festival in Latur region
2. To discuss Eco-friendly Ganesh festival celebration in Latur city

**Methodology**

Descriptive research design was used for this study. The case study approach was adopted for doing the research. The paper is based on secondary data collected from the Collector office, Municipal Corporation and Police department Latur

**Issues Related To Ganesh Festival In Latur Region:****Noise pollution**

The activities of Ganesh festival cause the concerns in terms of water pollution, air pollution and noise pollution<sup>5</sup>. The firecrackers used during procession, cause noise pollution<sup>6</sup>. It has adverse effect on the health such as hearing loss (temporary or sometimes permanent), high blood pressure, heart attack and sleeping disturbances. The drums, music systems used during procession create noise which is very much above the normal level. According to D.B. Smith, 60 dB (decibels) is the normal level of noise during conversation, while 80 dB noise is painful<sup>7</sup>. Almost in all major cities, it is approaching to 100 dB.

**Law and Order**

India is country of festivals; the unique feature of the Indian culture is its unity in diversity. The Ganesh festival is one of the largest religious celebrations especially in Maharashtra. So the issue of Law and order is always there. Latur is one of the cities known for religious harmony. All the peoples from different castes are come together and celebrate their religious festivals. District administration with help of Police department effectively tackled the situation related to law and order in the Ganesh festival time.

**Water pollution and wastage**

Acidic nature of water due to in idol immersion was reported in assam<sup>8</sup>. POP makes water alkaline if deposited excessively. Calcium and magnesium concentration in water increases significantly leading to increase in the hardness of water<sup>9</sup>. The plaster of paris, clothes, iron rods, chemical colors, varnish and paints used for making the idols.

deteriorate water quality of Tapi River<sup>10</sup>. Due to deterioration of potable water, these water resources are harmful for domestic and drinking purpose. The cumulative effect of this usage can be disastrous because many of these metals are poisonous. Central Pollution Control Board guidelines for idol immersion mentioned below<sup>11</sup>

1. Idols should be made from natural materials as described in the holy scripts
2. Use of toxic and non-biodegradable chemical dyes/oil paints for painting idols should be strictly prohibited.
3. Worship material like flowers, *vastras* (clothes), decorating material (made of paper and plastic) etc. should be removed before immersion of idols
4. Public should be educated on ill effects of immersion in the holy water bodies through mass awareness programme.
5. Temporary immersion ponds should be made at least 50 meter away from water body.

**Other Health issues**

The Pb concentration was found to be higher than pre immersion phase in the post idol immersion times, which may ultimately cause serious health hazards in human's ;exposure to Pb above permissible limits will cause adverse physiological effects on excretory, digestive, circulatory and nervous systems<sup>12</sup>. Mercury may magnify in their concentrations at different trophic levels, including in fishes and birds inhabiting the lake. People consuming contaminated fish caught from the lake over a period of time may get afflicted with mercury poisoning, methyl mercury when it enters the human body, concentrates in the brain and destroys the brain cells, damaging the central nervous system<sup>13</sup>.

Drying of water source (water streams) : Plaster of Paris does not dissolve into water which leads to blockage of internal streams of water bodies<sup>14</sup>

**Eco-Friendly Ganesh Festival In Latur City Planning**

The District Administration organizes a peace-keeping committee with all faiths and religions before the festival season starts. The meeting was attended by more than 1,000 representatives from the societies and student organizations. Apart from peaceful conduct of the festival itself, the main

**Evaluation of alternatives**

issue discussed was about the availability of water for immersion at 6 locations in the city. The demands from the representatives were to create artificial ponds in case the sources are dried up. In the initial meetings there was a huge hue and cry from the members about donation of idols to Municipal Corporation instead of water immersion. The members had an apprehension of safe disposal of idols or mishandling by mischievous people etc. It was very difficult to convince the representatives about safe reuse of idols by returning back to the sculptors. After three iterations of meetings with the representatives and the associations, with the help of social media campaigns, appealing to the people about water conservation by municipal corporation and the extensive usage of Facebook, Twitter and WhatsApp messaging services, citizens could be convinced importance of the water management for Latur City. The Local Newspapers played a major role in convincing people.

**Organizations involved**

The initiative was taken by the District administration headed by the District collector, Latur with the help of Police administration, Civil defense, Municipal Corporation, Social organizations, different political parties, religious leaders etc. People's participation in any such massive work is of great importance. This revolutionary work was only done through participation of every element from society including people's representatives, administrative machinery, political leaders, social workers, charitable organizations, entrepreneurs, citizens, students and people of all castes.

**Figure No. 1 Organizations involved****Execution Awareness about program**

Due to a strong mass awareness campaign by the administration and the synergy among various stakeholders, the project steered into the right direction. No objections were raised by the representatives of Ganesh Mandals as well as the people all over the city. In fact, all citizens and the public representatives responded positively and welcomed the historic move.

**Creation of Database of Ganesh Mandals**

From the initial stage the database of Ganesh mandals has been maintained at Police stations and Municipal corporation office. A special window was established at Municipal Corporation to register Ganesh mandals and issuing necessary NOC's from police, electricity department and food and drug department.

**Set up of Collection points**

Collection points of idols have been set up near the immersion places. The officials of Municipal corporation and Police personnel were deployed at every collection point under the supervision of senior officers.

**Receiving and registration of Ganesh Idols**

As per record, Idols were collected by Officers-Incharge of Municipal Corporation with all necessary precautions. The data of same has been maintained and a certificate of appreciation was issued to the Ganesh Mandals in presence of the District Collector, District Superintendent of Police and Municipal Commissioner for helping the administration and conserving water.

**Safely inventorying of idols in presence of President of Mandals and authorities**

The special attention was given for inventorying of idols in presence of President of Mandals and municipal and police authorities.

**Transporting Idols to Wadwal**

The safer place for inventorying of idols was identified at Wadwal, Taluka Chakur. The idols were transported by using government vehicles under the supervision of officers.

**Issuing certificates to Mandals**

More than 28,500 idols were collected at these five locations without expending as mentioned above. Certificates of appreciation were issued to each and every citizen donating the idol to Municipal Corporation. Provision is made for purchasing new idols in the following year from the sculpture at a discounted price against the issued certificate. Sculptors' felicitation was done by the District Administration for taking back idols for refurbishing and re-use purpose.

**Benefits/Outcome/Result**

The Municipal Corporation was supplying water to 56,000 households once a fortnight from August to October last year. Every year after Ganeshotsav, the idols of Lord Ganesh are immersed in Wells/lakes as well as in the nearby river. Since all the water bodies were dried-up due to severe deficiency of rainfall, the question of immersing public as well as domestic idols of Lord Ganesh was haunting the administration. A proposal to fill around 2 crore liters water with tankers came up in these peace-keeping meetings and it was costing around Rs. 33 lacs just for this activity alone. Apart from this, the most important aspect was wastage of 2 crore liters of water just for immersion during such a severe scarcity period.

**Table No.2 Water required at Immersion points**

Sr.No.	Water body	Water required
1	Siddheshwar Well	20m*15m*15m = 45,00,000 Litres
2	Tiwari Well	10m*11m*10m = 20 lac litres
3	PWD Well	15m*12m*13m = 30 lac litres
4	Government Quarters Well	12m*11m*10m = 25 lac litres
5	Kava Lake Point	50 lac litres
	Total	1,70,00,000 liters

(Source: District administration Latur, [www.latur.gov.in](http://www.latur.gov.in))

1. The total water required to be fill into these wells was crossing more than 1.7 crore litres and that too for just one day for the immersion activity. Considering the seepage at 25 percent, another 42 lac litres were to be filled into these five locations. So, assuming a pessimistic view also, more than 2 crore litres or 20 MLD of water was to be supplied for this single day activity. Latur City Municipal Corporation was supplying 20 MLD per day per rotation for the entire city as a regular water supply during this festival season.
2. The number of tankers Corporation required to fill these five locations with a water of 20 MLD were around 3,333 with a capacity of 6,000 litres each to do this gigantic task. The market rate of each tanker in the district for the year 2019 was around Rs 600 and safely assuming the expenditure would have crossed more than Rs 20 lacs .
3. These five locations were to be desilted since the wells and the lakes were filled with last year's immersion residues like plaster of Paris, mud etc. Desiltation at approximately 600 cubic meters at all locations at the rate of Rs 684/cu mts was costing more than Rs 4 lacs. The task of dewatering and desilting was costing Rs 65/1000 litres which was more than Rs.10.5 lacs respectively.
4. Artificial lake to be setup at Kava would have cost another Rs. 3 lacs.
5. Revival of five water bodies used for immersion activity

**Pre and Post Sensitization Scenario**

The Idol donation has been a huge success for the district administration. This is a first of its kind initiative in the entire State of Maharashtra where such a large number of people enthusiastically participated in the programme and made it a grand success. The Certificates of appreciation urges the citizens to come forward in the coming years to safely dispose-of the idols by donating to the district administration or at their residents itself. As an Environment protection measure, the District Administration has also urged the residents of Latur to use only mud Idols and not to Plaster-of-paris made idols at any cost.

In the times of global climate change, changing monsoon seasons, deficiency of rainfall periodically etc. the relevance and significance of the work done in the last two years in the city limits is significant. The water conservation under taken and the complete planning and execution of the

Ganeshothsav done in Latur city has much significance and relevance for all other cities to replicate. The efforts taken to educate people in such a sensitive topic and getting desired results is commendable. In summary, 28,500 idols were collected and the total water saved from the exercise was more than 20 MLD. The total expenditure avoided was more than Rs. 33 lacs and just by persuading and educating the citizens through mass awareness campaign the entire Ganeshothsav went smooth.

**Innovation**

The innovative idea of water conservation and environment protection with people participation method was executed in the city like Latur. For the first time in over a century, Ganesh idols at Latur weren't immersed due to acute water shortage in the town<sup>15</sup>.

**The Revival Of Public Wells**

The revival of public wells in the city was undertaken on a large scale during the scarcity times in Latur in 2019. All five wells were given administrative and technical sanctions for revival and expansion immediately so that it will recharge ground water in the nearby areas. More than 1 crore rupees were utilized for this works on a priority basis. The expenses saved from immersion activity was rightly used for the work of revival of public wells.

**Suggestions**

Ganesh festival celebration can be made further eco-friendly and more useful to the society by :

Minimizing the conflicts between people of different societies with the help of political, social and religious leaders by adopting the practice for one colony one Ganesh mandal.

A law should be made by the Government for big budget Ganesh mandals and compelling them to use the portion of collected funds on environmental and social development practices in that region.

Establishing women co-operative society from collected surplus funds as a part of women empowerment.

Imposing Additional heavy tax on Ganapati idol made up of plaster of paris & height above 1.5 feet to retailers.

Promoting ECO friendly Ganesh mandal by giving them benefits and subsidies.

Arrangement of movable immersion tank at different places which will minimize water pollution problems and traffic jams, conflicts due to immersion rally.

Collecting the flowers and Nirmalya for manufacturing organic manure.

Creative use of human resource for social & national development.

Ganesh mandals have a highly motivated constructive youth force of volunteers gathered for social cause. Mandals should be promoted to undertake disaster management trainings ( fire safety, flood rescue, CPR, disaster response etc.) for members and citizens of that region and motivated to maintain disaster inventory. It will create trained workforce network at street level. The administration can motivate mandals by arranging competitions and giving prizes for best activity.

**Conclusion**

The tangible impact were

1. the immediate change in people mindset for water conservation by donating the idols to district administration
2. 40 MLD water saved
3. Rs 33 lacs expenditure saved and
4. the protection to environment
5. No conflicts among Ganesh mandals.
6. Minimum noise and air pollution
7. Revival of water bodies as the fund was diverted for right purpose.

The intangible impact was encouraging the citizens to continue the tradition for the years by donating or reusing the idol instead of immersing in water and saving water. 100 per cent achievement without making any compulsions

and only by public participation was done under the guidance of then Collector Honorable G. Sreekanth. The district administration was appreciated by citizens, media, environment protection bodies and the state government for conducting eco-friendly activity.

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