

HINDU FESTIVALS: HAZARDS TO ENVIRONMENT AND ECOLOGY

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ABSTRACT

India is known for religious festivities. The Hindu religion is polycentric allowing multiple sects and innumerable gods to co-exist. These gods are ritually consecrated and the cycle renewed through annually held festival. Since, Hindu belief system posit for endless flow of matter, energy and symbolism; much of the festivals involve the act of visarjana (immersion). Just like the Universe which is bound under the cycle of creation, maintenance and dissolution for renewal afresh, the immersion of idols and the accompanying celebration through fire crackers or colours, does cause ecological overload in the water bodies, particularly the rivers. River bank is the 'tira', the point of crossing over into transcendental time. Idols cross over into another time through dissolution in river water. Henceforth, rivers are getting inundated with the high pollutants. The paper examines the hazards caused to the ecology due to the increasing usage of non-bio-degradable substances during Hindu festivities.

KEY WORDS: *Pollution, Festivals, Hinduism, Pandal, Idol, Environment*

India is described as a land of many religions and festivals. It's a multi-ethnic, multi-lingual and multi-religious country. In India, festivals are spread throughout the year and people find resource and time to celebrate these festivals with great enthusiasm. Besides main festivals, there are many local festivals. These festivals involve rituals and expenses. With increased culture of consumerism, these are often sponsored by the corporate for publicity. Behind the pomp and show of great celebration hides the painful tales of impending environmental hazards. The deadly impacts of such celebrations are the main postulates of this research article. Certain measures have been suggested to overcome this problem.

The environment pollution affects the health of more than hundred millions of people all over the world. Pollution is injected into a natural environment usually by humans. When foreign bodies like oxides of nitrogen and sulphur or lead containing fumes and fluids are added in significant quantities it becomes harmful to plants animals and human beings directly or through food chain. India is one of the worst performer in causing ecological degradation. Added to this story are various reasons deeply rooted in its traditions, customs, religions and practices. Festivals are celebrated at regular interval throughout the year. No one gives thought to the effects of such festivals upon the flora and fauna of this country. Among the Hindus, the biggest festivals are Durga Pooja, Ganesh Chaturthi, Deepawali, Holi etc.

Durga Pooja is one of the biggest festivals of Hindus particularly those living in the Eastern parts of India. In places like Kolkata, it becomes an all-out affair with thousands of pandal or temporary temple structures set up all over the city and its outskirts to worship Goddess Durga. Besides loud live music, musical performances and feasting create lot of problem for the environmentally conscious people. People from all corners travel into the city and visit the Pooja Pandal to participate in the festivals. This causes serious traffic problems and air pollution. The month long festivities end by the immersions of richly decorated figures of the Goddess Durga with huge processions, in the river.

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However, the immersions of thousands of statues every year into the Indian rivers, lagoons and lakes during festivals such as Durga Pooja and Ganesh Chaturthi, cause a potential hazard to environment. The Indian environmentalists have always raised serious questions about the dangerous level of toxic contents of these statues. The campaigners for Green Peace India have also raised a question mark on the bigger and brighter idols for which toxic material such as colour coats are used. Traditionally, the idols were made from clay, mud and vegetable based dyes, but with the commercialization of these festivals and increased interest of corporate houses, who sponsor the Idols for their own gain and publicity; more and more harmful paints and colour are used. Materials such as plastic, plaster of paris are used which do not dissolve in water, consequently lowering oxygen to a level that is harmful to aquatic bodies. Aquatic pollution happens because of the presence of undesirable foreign materials either dissolved or suspended which are harmful to living things. Carcinogenic heavy metals like lead, mercury and chromium are present in the paints used to decorate the sculptures. These contaminate water affecting the life cycle. The need of the hour is to issue strict guidelines for the organizers of these festivals not to use toxic materials and use of eco-friendly raw materials. This must be encouraged to check this ever increasing social menace. Sujoy Chatterjee and Dr. Prashant Mehta in their study titled “Festivals: A Time of Celebration or Impending Environmental Disaster”¹ have pointed out various types of pollutions generated in large amount all over the country during the time of celebration. They have also raised the question on the sustainability of other creatures living in water. They have shown the impact of various materials on aquatic environment during the Idol immersion. Similarly, P.K. Goel and K.P. Sharma have enumerated the impact of immersion of idols in water bodies in their voluminous study *Environmental Guidelines and Standards in India*(1996). The result of their study is reproduced herein as Table 1.

Table 1: Changes in Concentration (mg/l) of some chemical pollutants after idol immersion in water bodies²

Chemical Pollutants	Mean Concentration In Water	Concentration before Immersion of Idols	Concentration after Immersion of Idols
Calcium	25.14	43.77	68.4*
Magnesium	7.785	6.590	10.02*
Molybdenum	0.090	0.149	0.534*
Silicon	3.537	2.954	3.826**
Arsenic	0.124	0.121	0.497
Iron	0.212	0.125	0.22**
Lead	0.289	0.351	0.45**
Mercury	0.689	0.553	0.778**

Threshold Limit Value (TLV): *TLV = 0.01; **TLV=0.05

(TLV is the permissible level of a toxic pollutant to which a healthy person is exposed during an eight hour day without any adverse effect).

The study reflect how the polluted water includes a list of decoration materials such as cloth, polish, paint, ornaments, cosmetic items, flowers, garlands, oily substances besides bamboo sticks, polythene bags and other plastic items. The impact of these materials on the aquatic body is very hazardous. The chemicals and non-degradable substances affect various species living in water. These water creatures further contaminate the food chain consumed by human beings.

Another Indian festival of importance is Ganesh Chaturthi usually celebrated in Maharashtra and some parts of Northern India. The practice of immersion of Ganesh Idols after the Ganesh Festival in various cities is also causing great danger to the aquatic bodies which leads to the death of tons of fish and other precious water inhabitants. Repeated warnings and cautions sounded by the ecologists and environmental scientists towards the possible hazard inflicted by Plaster of Paris are mostly ignored both by the idol makers and its buyers. The chemical dyes and colours being used to dye the idols contains poisonous elements particularly red, blue, orange and green colours containing Mercury, Zinc oxide chromium and lead, the potential causes for the development of cancer. Let us see the magnitude of this hazard in terms of figure. More than 7500 Idols of Ganesh weighing more than 20 tons are immersed every year in Mumbai alone. According to a rough estimate about 1.5 lakh idols are immersed in Mumbai seashore every year. Chemicals from the paints, polish and POP have posed a serious threat to the existence of aquatic bodies. Reckless conduct of festivals like Durga Pooja and Ganesh Chaturthi have become a major threat to human beings who depend on water and fish of these water bodies as the same river, pond and lake water is also used by millions for bathing, working and drinking purposes. High levels of lead can damage heart, liver and kidney. It can also affect circulatory and central nervous system.

Holi is a festival of vibrant colours that brings with it a variety of colours harmful to human beings. Nowadays, the colours used are synthetic and toxic because of the presence of cheap materials like mica, acids alkaline and pieces of glass. These harmful chemicals cause skin disorder like irritation and itching. These can also impair vision and cause respiratory problems and even cancer. In the joy of celebration nobody pays attention to these fatal hazards. Every year school children and younger ones develop skin disorders immediately after celebration of festival especially Holi. Environmentalists have always warned people against use of such hazardous materials. People should rather use natural colours and vegetable based dyes for making colours.

Deepawali is celebrated with utmost pomp and show all over India. This is a festival which has got the dubious distinction of causing noise and air pollution of the environment . One of the greatest sources of pollution during this festival is the crackers being used by the children and young alike. Noise pollution from Deepawali jumps between 67.7 db and 88.3 db. which is higher than the prescribed level of 50 db. Studies by the Centre for Science and Environment (CSE) around Delhi conclude that in 2008, RSPM levels during Diwali doubled compared to 2006. Various study suggests that in the case of metros, noise pollution may reach upto 100 db. Crackers are manufactured using barium sulphate, sodium nitrate, sulphur and potassium chloride and when burnt emit gasses such as Sulphur dioxide, oxides of nitrogen, oxides of heavy metals and pollution in the air. These chemicals also cause eye irritation, respiratory disorder and other allergies. Deepawali is a festival which celebrate the Goddess of prosperity but people unknowingly make their surrounding polluted in spite of warnings given by the Government and environment conscious organizations. Even strict warnings are given to public to refrain from bursting crackers named interestingly for its ferocity as an environmental pollutant like atom bombs, hydrogen bomb and bullet bombs. But nothing seems to work with the fest- intoxicated people. There is a need for change of attitude and taking the social responsibility for discouraging people from bursting such lethal crackers. There are many colonies where people collectively arrange fireworks and bursting of crackers. These shows not only cause noise pollution and disturbance in the civic life of that locality but also cause various respiratory and eye disorders in the aftermath of festivals.

Table 2: Comparison of Ambient Air Quality on Diwali during 2006 & 2008³

Parameter (ug/m3)	Recording in 2006	Recording in 2008	Normal residential standard
SPM	246	243	200
RPM	133	129	100

Not only festival, but even growth in pilgrimage has left the pilgrim places teething under massive ecological degradation. Kiran A. Shinde⁴ has examined environmental change at the Hindu pilgrimage site of Vrindavan in Uttar Pradesh. Vrindavan is home to more than 5000 temples and receives more than 6 million visitors every year. Shinde interviewed various social groups, including religious gurus, priests, visitors, government officials, local residents, and community leaders, and discovered tetra-layered response to the ecological crisis in Vrindavan- denial, indifference, helplessness, and stewardship. “Denial” and “indifference” are common with those engaged in the pilgrimage rituals as they use the language of transcendence framed through myths, religious ideologies, and ritual practices. Those outside economy of religious ritual recognize environmental impacts but feel “helpless”. Only a handful of the residents demonstrate environmental stewardship.

Kelly D Alley has done extensive work on the water pollution of the Ganges caused by the pilgrimage. In an ethnographic study, *“On the Banks of the Ganga: When Wastewater Meets a Sacred River”*,⁵ Alley provides an overview of the Ganges in terms of waste disposal, and its impact on the sacred river. Alley also examines the arguments defending both the sacred purity and pollution of the Ganga river put forth by the government authorities and religious people.⁶ She uses Benaras as an example, and find how each group views this age as a degenerate one(kaliyuga), but they differ on the loci of degeneracy. The government cites population growth, urbanization, industrialization, and technological development as the source of the degeneracy, while religious people focus on moral degeneracy. Interestingly, it may appear but Alley found how the people continue to look to the government for infrastructural improvements in sewage treatment and management although they clearly assess the problems through different prism. She further defines waste as “a social construct or problem,”⁷ and examines various interpretations and “ideologies” of pollution and waste by differently situated Hindu residents of Benares in order to analyze the ways in which theories of purity and pollution influence public debates and governmental policies about the uses and condition of the Ganges.

Purushottama Bilimoria have studied environment ethics of various Indian religious traditions. He does discover traditional approaches to the issue of environment. In an essay, “Environmental Ethics of Indian Religious Traditions”(1998)⁸, he states:

“The Indian religious traditions are intertwined with equally disparate cultural, social, linguistic, philosophical and ethical systems that have developed over a vast history, compounded with movement of peoples, foreign interventions, and internal transformations in structures and identities experienced over time. How does one then begin to talk about environmental values and concerns in the Indian religious traditions? Well one can, albeit, randomly and selectively; and so this essay will be confined to tracing the contours of certain highlights and tensions in the traditional approaches to the question of the environment”

He concluded in his essay that traditional wisdom for environment regeneration is available and there is need to rethink over traditional resources for course-correction over growing degradation of our ecology. Bilimoria writes:

“The suggestion is that there are indeed resources within the traditional systems - Yoga, Jaina, Buddhist, Hindu, Sikh, Islamic, Christian, Gandhian, all of which have helped give shape to a modern, secular India - to increase awareness of environmental concerns and to instigate the extension of ecological values and modal practices to the plethora of environmental problems facing Indians, as they do most human beings in other parts of the world.”⁹

Festivals are celebrated for happiness and celebration of life. If a festival becomes a threat to life, one has to be alerted about its celebrations. The new trend make it apparent that money is wasted in the name of festivals and ultimately this become vicious trap for the commoner. There is a need to rethink the entire modes

of celebrations so that the festivals do not become hazards to our life. Hence some plausible solutions have been suggested.

Community Celebration in place of individual celebration should be preferred and encouraged. This will not only reduce the cost of the celebration but reduce the use of materials causing pollution. Thus there would be less noise, water and air pollution. The celebration should be time framed extending maximum upto 3 to 5 hrs. Instead of buying chemically prepared fast colours, vegetable based, eco- friendly colours should be used during Holi. Eco- friendly Diwali crackers can be made by using recycled papers that will help to reduce the decibel level. In decorating the houses, instead of electrical decoration, the traditional lighting of earthen lamps should be preferred. This will not only enhance the beauty of the house but cut down the enormous electric consumption. The earthen lamps use less quantity of oil and it could light up for three to four hours. The tendency to show off should be avoided. This is because it leads to unbridled consumerism exploiting the natural resources. During Deepawali, we dispose off old garments, old glass items and other plastic decorative materials which are unused or unwanted. Some of these remain in nearby dump post causing pollution and damage to the environment. It is therefore, advised to identify needy people who could find some of these items useful to them. In Durga Pooja and Ganesh Chaturthi the idols should be painted with herbal colours. The ornaments should be eco-friendly. Above all there is a need to be more environment conscious so that we do not sacrifice our long term interest for small short term gains and pleasures. There is also a need to change the mindset of the people.

Let us be responsible, identify the crisis before it is too late. We are answerable to the generations to come for being so reckless and irresponsible. Stop burning crackers and use of synthetic colour, stop polluting the rivers and water-bodies, and exercise our wisdom, else we would be compelled to welcome a generation of crippled off-springs for no fault of theirs. The swelling number of disabled people-both mentally and physically- is a testimony of our failure to check avoidable manmade disasters resulting out of generous loopholes available in the existing systems of governance. Stringent punishment of highest order should be implemented and invoked against those who violate norms to check the growth of defaulters who wilfully pollute the nature, eco-system and its water bodies. Advent of globalization and free market economy has played havoc with the lives of Indian masses. Sudden availability of cheap goods which contains pollutants, in the market has taken over the otherwise traditional forms of material available in the Indian market. Traditional mode of celebration was more indigenous and eco-friendly. The globalization of economy has left its impact all over the world including India. Strong political will coupled with support from judiciary and community leaders can certainly make a difference in the lives of people, protection of environment, its ecology and precious water bodies and creation of a better world to live in.

Footnotes & References:

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