

Lessons from Kollam fire disaster: Disaster Management for UPSC

The Puttingal Temple fire was one of the worst tragedies to ever occur in the history of Kerala. An accidental fire caused an explosion which resulted in 111 deaths and 350+ non-fatal injuries. The subsequent investigations revealed gross miscalculations on part of temple management and civic authorities leading to a discussion how woefully inadequately enforced are crowd management.

What was the Issue?

Temples in southern India often have festivals with displays of fireworks and firecrackers to appease the female deity. There are annual competitions staged across the state of Kerala for the most spectacular displays.

On 10 April 2016, two groups of devotees set off fireworks while thousands participated in the festival at Puttingal temple in the Kollam district of Kerala. The temple's authorities had informed the police that though they had no written permission from the district authorities, they had obtained a verbal permission and informed the police authorities that they had verbal permission from the district authorities.

An explosion when a burning ember from an air-burst firework, known locally as *Amittu* fell into the stash of stored fireworks. The resulting explosions caused the storage building and adjacent office building to collapse leading to most of the casualties. The blast was felt by people living more than a kilometre away from the temple.

On 12 April upon investigations by the authorities, it was revealed that due to safety concerns, the temple had been denied permission, but it proceeded due to pressure from the local people.

Could the tragedy have been avoided?

- There was much negligence on part of the authorities.
- Authority of the district administration should have taken all precautions via the Standard operating procedures(SoP)
- Powerful local interests were determined to carry out the celebrations with fireworks, throwing caution and warnings to the wind
- The Police and district administration were against this fire works, but were powerless in front of local bodies due to sheer strength in numbers.
- This is a consequence of weakening of the Police and local administration by locally dominant interests

What could the district administration have done differently?

- If the entry and exit points could have been regulated better, may the casualty count would have been lower
- A minimum distance of 25 m from the fireworks and the people should have been enforced
- A proper storage area for the fireworks, preferably at a safer distance from the festivities should have been arranged
- Supreme court guidelines regarding crowd management should have been followed. This was not followed in earnest. So may be if that was, the tragedy could have been avoided
- The fireworks in use should have been placed on an elevated platform with sandbags at the base, in order to deny any combustible materials.
- Fire fighting vehicles should have been present along with the presence of essential medical personnel.

What were the measures the government administration undertook?

There were both short term and long term measures which the Government of Kerala undertook following the tragedy:

Short term:

- The state government conducted a thorough inquiry to the incident and held people accountable
- It provided adequate medical aid and assistance to the injured
- Gave strict and uniform guidelines for future functions and organisations
- The government also announced ex-gratia relief of ₹10 lakh to relatives of each of those killed in the fire tragedy, ₹2 lakh for the seriously injured.

Long term:

- The tenure of the administration is too short. The DC and SP of the district do not get the time to understand the nuances of the district administration. Therefore it was proposed to increase their tenure.
- Following the detailed guidelines of Home ministry became a norm for any future festivals of such a magnitude.

Laws and Regulations regarding the bursting of firecrackers

- As per the "Environment Protection Act, 1986 and the Environment Protection Rule, 1986 and 1999 (amendment) *"The manufacture, sale or use of firecrackers generating noise level exceeding 125 dB(A) or 145 dB(C) pk at 4 meters distance from the point of bursting shall be prohibited."*

- Determining dB (decibel) levels is something which requires an expertise and hence it must be on the part of the manufacturer to adhere to, and a duty of the citizen to not buy crackers which violate this provision.

Supreme Court Guidelines regarding bursting of crackers

In the landmark judgement by supreme court in the year 2005, the court came out with the following guidelines regarding bursting of firecrackers:

- The Department of Explosives may divide the firecrackers into two categories– (i) Sound emitting firecrackers, and (ii) Colour/light emitting firecrackers.
- Every manufacturer shall on the box of each firecracker mention details of its chemical contents and that it satisfies the requirement as laid down by the Department of Explosives.
- This order came into force , in pursuance to Articles 141 and 142 of the Indian Constitution.
- The authorities have been reluctant and apprehensive in implementing this order.

CONCLUSION

- Bursting crackers has been a custom since time immemorial but it can be harmful, should it be done in a haphazard manner.
- The authorities should ensure the guidelines are followed earnestly
- The National Disaster Management Authority (NDMA) act for disaster management and policy should be followed.
- Crowd management needs to improved
- Technology should be used as an enabler
- Standard operating procedures must be followed
- Spread awareness and educate the people along with strengthening the administration so that it is able to carry out its duties.