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Kumbh Mela Report, 2013, Allahabad, Uttar Pradesh



Submitted By

Doctors For You

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This report is a compilation of the views, opinions and information shared by all stakeholders of the *Mela* which could not have been possible without their active involvement. We express our gratitude to them for their cooperation and warm hospitality.

Lastly, we feel we have come out as a stronger team because of the coordinated, motivated and tireless effort that the members of our team have put in. We sincerely hope that this exercise and its learning will contribute to the strengthening of the organization.

The study was done by Doctors For You (DFY), which is a Humanitarian and Capacity Building Organization formed by a team of highly experienced and specialized doctors. DFY's focus is to address the most immediate and concerning problems faced by disaster affected populations viz. healthcare, hygiene, disaster response and emergency medical aid in the most affected developing countries thereby touching millions of lives.

Sincerely,

Doctors For You



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Executive Summary

A brief overview on *Kumbh Mela*:

Kumbh Mela is a mass Hindu pilgrimage of faith in which Hindus gather at a sacred river for a bath in the river. It is held every third year at one of the four places by rotation: Haridwar, Allahabad, Nasik and Ujjain. Thus the *Kumbh Mela* is held at each of these four places every twelfth year. Ardh ("Half") *Kumbh Mela* is held at only two places, Haridwar and Allahabad (Prayag), every sixth year. The rivers at these four places are: the Ganges (Ganga) at Haridwar, the confluence Sangam of the Ganges and the Yamuna and the mythical Saraswati at Prayag, the Godawari at Nasik, and the Shipra at Ujjain.

Kumbh means a pitcher and *Mela* means fair in Hindi. The pilgrimage is held for about one and a half months at each of these four places where it is believed in Hinduism that drops of nectar fell from the *Kumbh* carried by gods after the sea was churned. The festival is billed as the "biggest gathering on Earth". There is no scientific method of ascertaining the number of pilgrims even approximately and the estimates of the number of pilgrims bathing on the most auspicious day may vary widely from two to eight millions.



This year *Kumbh Mela* has been organized at Allahabad. To prepare for this event the organizers set up new temporary roads, toilets, hospital facilities, police stations, fire stations, post offices, railway reservation centers, *Bhule Bhatke Kendra*, new water and sewage systems, tourists camps to accommodate large number of Indian & Foreign Visitors.

Background and Context of the Study:

Kumbh Mela is the largest mass gathering in the world which happens after every 3 years. The next *Kumbh Mela* will be held at Nasik, a city which is 75 miles away from Mumbai, Maharashtra. So, in this perspective, Maharashtra Govt. assigned DFY team



to study the organizational and preparatory aspects of *Kumbh Mela*, 2013, so that Govt. of Maharashtra can also implement the same process in their state.

The main objective behind this study is to:

1. Identify the resources available in the *Mela* area, list out the Govt. Organizations, Non- Government Organizations and their interventional areas.
2. Find out the common health problems, facilities available for health diseases treatment of common diseases, accessibility, affordability and quality of the health care services / facilities / institutions.
3. Overall living condition inside the *Mela* area i.e, drinking water, sanitation and hygiene, awareness level of common peoples on WASH.
4. Study to find out the major problems, gaps and future needs.

Stakeholders Met:

The team visited all the 14 sectors in the *Mela* area under the 25km of radius area for the perception study. During the study team interacted with various stakeholders including Govt. Officials, Devotees, Sadhus etc.

Methodology of the study:

Following are the methodology that were used during the study-

- Transect walk
- Social and Resource Mapping
- In-depth interview

The in-depth interviews were conducted with different Doctors, Police personnel, Fire Service personnel, Devotees, Sadhus etc. to understand the overall scenario of the *Mela*. In addition to above, semi structured interviews were also conducted to find out the WASH status inside the *Mela* area.



Findings and Analysis of the Study

Health Care Interventions:

During our interaction with the Zonal Officer Health Department, the team was informed that health care services became operational in mid November'12, around 250 doctors including specialists, Ayush doctors were deputed in the *Mela* area.

10 Sector hospitals have been constructed in the *Mela* area, each of these hospitals comprises of a general OPD and 20 bedded in-patient unit. The hospitals operate 24x7 throughout the duration of the *Mela*, 4 MBBS doctors are deputed in each sector hospital, 2 doctors work in 8 hour shift and another 2 doctors work 12 hours shift. Apart from that nursing staff and 1 ambulance are also deputed for each sector hospital. The doctors come from the new PHC's in Allahabad Mandal area and are assigned to *Mela* for two months. It has been observed that the daily OPD load is around 250-300 patients in each sector hospital. Each sector hospital has a pharmacy and medicines are provided free of charge.





Apart from that 22 First Aid centers have also been set up by the health department in 12 sectors, each first aid centre having 1 Ayush doctor, 1 Pharmacist and 2 bedded inpatient unit. There are 2 infectious disease hospitals in the *Mela* area with 20 beds each.



The focus of this healthcare delivery system is the Central hospital in sector 2. Here patients can be seen by a range of specialists, including Orthopedics, Medicine, Surgery, ENT, Eye, Skin and Obstetrics. There is a 100-bed inpatient unit and a 2-bed ICU. Diagnostic facilities such as X-ray, ultrasound, ECG, laboratory is also available. The Additional Director Health supervises the entire healthcare delivery system from the *Mela* field office set up in the Sector No. 2.





Above 70 ambulances and some river ambulances have been deployed for transferring patients who need specialized care from the First Aid Center or Sector Hospitals to Central Hospital or Swarup Rani Medical College.

Safe passages have been constructed in the *Mela* area for running of emergency vehicles during any emergency periods. DFY team was also informed that in case of any mass casualty incident 100 beds are reserved for the *Mela* in Swarup Rani Medical College.



DFY team found that till date no major outbreaks have occurred in the *Mela* area. The health department is also ready to tackle any outbreak by having a proper surveillance system in place. Diseases like fever, cold, cough are the most reported from the Sectors Hospitals.

In addition to above, the main focus areas of the health department are:

1. Hospitals- To provide health care.
2. Vector- To prevent Vectors migrating from Allahabad City to *Mela* Area.
To prevent vector breeding in the *Mela* area by DDT spraying, fogging etc.
3. Sanitation- To provide sanitation facilities to all the akharas/ santhas and general public in the *Mela* area and their maintenance.

Apart from that, the Health Department is also looking after the water quality in all their 22 circles by conducting random OT test twice every day.

Water and Sewage Intervention:



Unsafe water is the main cause of many water borne diseases. To prevent water borne diseases, water is another major focus area where Govt. of Uttar Pradesh has given their best input. DFY team interacted with Mr. D.N. Tiwari, In-charge of UP Jal Board, Sector 4, who informed the team that the Jal board provides running water supply 24x7 in all the sectors, with a 550 km network of pipelines connecting all the Akharas/Santhas, Hospitals, Police & Fire stations and other centers.

There are 42 high pressure pumps which have been set up for this purpose. On an average 45 liters of water are providing for per person on a daily basis. With the mission to provide safe and clean drinking water for the Devotees, water quality is tested by Jal board, through OT test of the supply water from 6 random sites.



It was also observed by the DFY team that Tata Group of companies have also given their joining hands with Uttar Pradesh Jal Board to provide safe and clean drinking water to the devotees in *Kumbh Mela*.

The UP Jal Board is also responsible for the sewage disposal in the *Mela* area. The board has constructed retention pools for sewage collection in the *Mela* area so that sewage does not pollute the Sangam area.

Bhule Bhatke Kendra:

The Kendra is meant for those who get separated from their families during the mass gathering. At the *Kumbh Mela* the Kendra is marked by balloons with the words “*Bhule Bhatke Kendra*”. Mr. Indra Kumar, in-charge of *Bhule Bhatke Kendra*, Sector No. 4 informed DFY that there are 6



Bhule Bhatke Kendra's in the *Mela* area, apart from which there is 1 camp where anybody who is lost is looked after.



The devotees who get separated from their family members can come to Kendra and report the incident. The Kendra then makes a public announcement and also displays the picture of the missing person on their display panels. All information regarding the missing person is also upload in their website which can be accessed by anyone. The in-charge also informed the DFY team that they have successfully located 1560 missing persons till date.

Fire stations:

It was observed that fire incidents are very frequent in the *Kumbh Mela* because of the cottages that are constructed with plastics sheets, inadequate temporary shelters, use of LPG cylinders, unplanned electrical lines nearby dwelling areas.

Mr. Suresh Chander, Fire Station Officer, *Mela* area informed the DFY team that the department has set up 36 Fire Stations in the *Mela* area. They have 46 fire tenders with 422 fire men deployed in the *Mela* area. He also added that the department has motorcycle mounted firemen with back pack fire extinguishers to provide emergency services to areas that cannot be accessed by the fire tenders. The





department also has an ambulance that can be used to transfer people from incident site to the hospitals.

There are 18 major incidents of fire reported in the *Mela* till date .

Incident report:

Serial no.	Date	Place	Cause	No. injured/
1.	17.12.12	Tent near Kotwali Jhusi	Electric sparks	0
2.	05.01.13	Alopi Bagh	Transformer sparks	0
3.	09.01.13	Sector 4, Akhil Bharatiya Chatur Sampradai	Electric sparks	0
4.	09.01.13	Lower Sangam Marg Chauraha	Electric sparks	0
5.	11.01.13	Tribeni road, Ganga lower Marg	Tent fire	0
6.	14.01.13	Sector 9, Murari Babu Ashram	LPG leak	0
7.	17.01.13	Purani Jhusi Kohana	Tent fire	0
8.	18.01.13	Sector 4, Akhil Bharatiya Shri Paresh Ramanandi Sanstha	Halogen fire	0
9.	20.01.13	Khadya Bibhag, Jhusi	Short circuit	0
10.	20.01.13	Shankaracharya Marg	LPG fire	0
11.	23.01.13	Prayag railway station	Transformer sparks	0
12.	24.01.13	Shriram Lochan Swarup Brahmacharya Math	Electric sparks	0
13.	25.01.13	Sector 11, Saket dham	LPG fire	25 Injured
14.	25.01.13	Sector 10, Krishnanand Ashram	LPG fire	0
15.	25.01.13	Mori gate	Short circuit	0
16.	27.01.13	Daraganj	LPG fire	0



17.	15.02.13	Sector 4, Nirmal Akhara	Short Circuit	1 Died
18.	16.02.13	Sector 9	LPG Cylinder	2 Injured

Disaster Response Team:

To mitigate any kind of mass incidence, the Govt. of Uttar Pradesh has deployed National Disaster Response Team in the *Kumbh Mela*. The NDRF team has been deployed to aid in search and rescue operations if necessary. The NDRF team has specialized diving equipment and experienced personnel for such operations and would be available throughout the course of the *Kumbh Mela*. The battalion comprises of Navy and paramilitary forces.

All selected members from different armed forces are given one month's special training before being sent to NDRF. Apart from that, other paramilitary forces are also deployed in the *Mela* area.



WASH:



To find out the status on WASH, a study was done by the DFY team in the Akharas/ Santhas of *Kumbh Mela*. During the study DFY team visited 55 Akharas/ Santhas from 11 sectors. It was observed that water and sanitation facilities are maintained by the *Mela* Committee. All the Akharas are provided toilets as per their needs depending upon the number of people staying in each akhara. It was observed that every santha/ akhara is being provided toilets from *Mela* committee and sweepers are also being allotted for each santha/ akhara.

1. There is 24 hours running water being provided by the UP Jal board in the *Mela* area.
2. All the akharas/sanths have been provided with toilets as per need by the *Mela* administration.
3. There are *Jan Souchalayas* made with tin sheets with 5 toilets each for men and women in the *Mela* area which can be used by the general public and devotees.
4. There are also *Sarvjainik Souchalays* made with canvas constructed in the *Mela* area to be used by the general public and devotees.
5. There are designated areas for open defecation in the *Mela* area which are used by the general public and devotees.
6. There are separate urinals for men and women constructed in the *Mela* area by the administration.
7. Designated sites for waste disposal are being provided by the *Mela* administration.
8. Sewage retention pools have also been constructed to prevent water pollution of the bathing sites.





Video Recording:

The DFY team also video graphed the crowd movement during the *Paush Purnima Snan* on 27th of January, 2013.



Findings:



1. The number of people entering the pontoon bridge from Jhusi to the Sangam area at 11:00 AM was 400 over a period of 5 minutes.
2. The number of people exiting from the pontoon bridge from the Sangam area to Jhusi at 11:10 AM was 443 over a period of 5 minutes.
3. The total number of people entering and exiting the Arail ghat at 10:30 AM was 1,236 over a period of 5 minutes.
4. The number of people exiting from the main exit road to Allahabad city was 280 per minute at 1:00 PM.
5. The average time of bathing is around 5 minutes for each devotee.
6. The breadth of the pontoon bridges is approximately 10 feet. And the maximum capacity is 15 tonnes.
7. You Tube links of the above videos
<http://youtu.be/CkWLP1fbeoQ>
<http://youtu.be/m8nipuAy9ho>
<http://youtu.be/ayU3zNw1Arg>
<http://youtu.be/4hqq6xFjdnk>

Stampede in Allahabad Railway Station:

A disaster in the making

An estimate of 30 million people descended to Allahabad this year, which is home to one of the world's largest religious gathering, to take bath at *Kumbh Mela*. The number of pilgrim on Sunday, 10th Feb was estimated to be over 3 crore in the city causing huge pressure at the *Kumbh Mela*. To manage this huge influx of pilgrims and overpressure, the *Kumbh Mela* administration repeatedly announce through a public addressal system, spreading 2,000 hectares of land, that pilgrims should leave the bathing Ghats immediately after bathing and should move for their respective destination¹. The pressure of the *Kumbh Mela* administration on the pilgrims to leave the *mela* area as soon as possible after the bathing on '*Mauni Amavasyaa*', ensue a heavy rush at the Allahabad railway station since most of the pilgrims have no alternative place to go other than the railway station. This results in overcrowding of the railway station, where more than 1.5 lakhs of pilgrim sprawl across the railway platform number 4 and 6, and over-bridge waiting for a *mela* special train that was introduced to ferry them to their destination. Moreover, a delay in running schedule of the special train to ferry the pilgrim leads to accumulation of large backlog at the station. In addition, the absence of contingency plan for the number of capacity the station can accommodate proved to add fuel to the fire. Given how the situations unfold, it was evident that a disaster is in the making. One tiny incident couple with miniscule mismanagement from the

¹ Tehelka, February 11, *Railways mismanagement caused the stampede.*

administration could result in the situation to spin out of control with high risk of causing a disaster with high casualty.



The Stampede

A tragic incident exploded at 7 pm when lakhs of devotees caused a melee when the railway authority announced a last minute change of platform for running the two *mela* special train. Shortly before their departure the Public address system at the railway station announced the change in platform. Though it was convenient for the passengers entering the railway station of reaching the new designated platform, for those who were already at the wrong platform, it was an uphill task to reach the new platform due to massive crowd sprawling and the stairs of the FOB were jam-

packed with the passenger sitting on the stairs for rest. However all wanted to board the train. Hundreds started moving towards the foot over bridge (FOB).

According to Ashok Kumar Sharma, public relations in-charge of *Kumbh Mela*, *“The footbridge where the stampede started was designed to hold less than a thousand people, but 3,000 people were using it at one point. The station, which was built to hold 25,000 people, had a crowd of almost 200,000.”*²

The crowd management system that was installed constitute of the traditional style of the Jawans of the RPF (26 jawans) and GRP. Some media reports that the stampede started when the Jawans started using baton to control the crowd, although the allegation was denied by the police officer.

² NYTimes, 12th February, *What caused the stampede at the kumbh mela.*



According to one witness account reported by media, *Shushanto Kumar Sen* state that, “*We heard an announcement that our train is coming on platform number 4 and when we started moving toward that platform through a footbridge, we were stopped. Then suddenly the police charged us with batons and the stampede started. After that people started tumbling over one another and within no time I saw people, particularly women and children, being trampled over by others.*”³

With a large number of people crowding the foot over bridge, the pressure was too great for the railings of the bridge to support. Finally, the railings give way and collapsed under extreme pressure leading to the stampede, causing many injury and death.

A sequence of factors is responsible for the stampede. A possible explanation leading to the stampede can be viewed as; the pressure of the *mela* authority on the pilgrim to leave the *mela* as soon as the bathing was over leads to massive crowd in the station, the delay in the running of train schedule of special train creating huge backlog, the mismanagement of the railway authority, inadequacy of robust crowd control and management, lack of medical preparedness and coordination between the railway authority and the *mela* administration on the number of crowd flowing to the city.

Aftermath of the Stampede and the authority response to disaster

The crowd management system that was in place collapsed following the stampede. A total of 36 lost their life in the stamped, being trample and crushed to death due to stampede triggered by the collapse of a railing of the over bridge. While 35 died on the spot, one succumbed to injuries later. According to Medical superintendent, Dr P Padmakar of the main state-run hospital, 23 of the death were women. Around 40 were injured due to the stampede.

The preparation towards controlling such event from happening and the disaster responses of the railways authorities garner wide attention and exposed gross weakness in medical emergency and disaster response. It took over an hour for the rail authorities to arrange for the stretchers for carrying the injured to the hospitals. The delay in the response also resulted in many of the victims being unable to access health services for almost 3 hours where bodies lay scattered on the platform no 6 and for the next three hours there was no one from the railways to carry the bodies to the hospital/mortuary. TV footage showed a grief-stricken man in tears as he cried for medical help for his father who lay on the platform. The

³ Dawn, 10th February, *Search for missing relatives, as Kumbh stampede claims 36 lives.*

⁴ The Guardian 11th February, Allahabad Train Station Stampede.



bodies of some of the victims shrouded in white cloth were kept at the platform for several hours.

Also, the railway hospital in Allahabad lacked basic facilities for trauma patients like oxygen. All the injured had to be shifted to the three state governments run hospitals in Allahabad. In addition, the lack of preparedness for immediate medical response, the response of the authorities was also hampered by the huge crowd which restricted the movement of emergency vehicles in the absence of pre designed safe passages for these vehicles. Eyewitnesses said some bodies lay unattended for several hours amid complaints there was no proper coordination among the agencies concerned after the mishap.

Over three crore people had converged for a holy dip on the occasion of 'Mauni Amavasya' a day considered the most auspicious day during the 12-yearly congregation. A total of 112 trains routinely pass through Allahabad and an additional 49 special trains were being operated on that special day, but there was no proper identification of trains, people were jostling to identify the departure trains.

According to other sources, there was a lack of coordination among the concerned Govt. Departments to tackle the mass incidence.

- Lack of Doctors and Ambulances, hospitals could not handle load of patients.
- No cloth to cover the dead bodies.
- Dead bodies were unidentified for many days.
- Special train information was not available in the railway display board.
- Only one entry gate when crowds were too heavy.

Learning's derived

The experiences of stampede presented several learning. For planned mass gatherings like pilgrimages, sports and political events, a set of measures should be taken in order to minimize the risk of a stampede or crowd crush or other types of disasters.

1. One has to make sure that the infrastructure (roads, corridors, open spaces, entrances and exits) is suitable for the mass gathering so that there is enough capacity and there are no bottlenecks or other compression points.
2. There should be a good crowd-management plan that is followed, which includes crowd monitoring, scheduling and control.
3. There should be a good medical preparedness for immediate response when the need arise. There is a need for medical preparedness not only in the *mela* but at importation



gathering location such as railways, bus station etc. where pilgrims commute to and from to the *mela* and their destination.

4. One must also have good contingency plans (e.g. evacuation, pre designated route for emergency vehicles) in case anything goes wrong.

Field Study, Report Compilation and Documentation:

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