

Nashik Kumbh Mela – A Case

On February 13, 2015, Dr. Ravindra G. Sapkal, Chairman & Managing Director of Sapkal Knowledge Hub, Nashik, held an urgent meeting with the Heads of all the colleges under the umbrella of Sapkal Knowledge Hub (SKH). The agenda was to decide whether to accept the request from Mr. Balasaheb Wakchaure, the sub-divisional officers, Igatpuri-Trimbakeshwar Division, Nashik. The mega-event, Kumbh Mela was approaching in few months and for the rigorous planning of the event, Mr. Wakchaure wanted the estimation of pilgrims and vehicles entering into the city of Trimbakeshwar, on the day of Mahashivratri, which was on 17th February, 2015. Further, he wanted the students of Sapkal Knowledge Hub to spread the message of Eco-friendly Kumbh or Harit Kumbh (*Harit* means Green). He assured all the required permissions for the staff and students of SKH. Dr. Sapkal considered it's a perfect opportunity to give the students real –life exposure and also for the social activity of Harit-kumbh. But the task was very tedious, as the doors open at 4:00am for darshan on the day of Mahashivratri and many pilgrims are eager to take darshan at 12pm at mid-night, so the total span of estimation was very long and continuous. Further the time for preparation like data collection method to be selected and applied, selection of points of data collection, equipment requirement and other minute planning like attire, food, transport, shift planning and overall data collection and estimation was very limited.

THE ORGANISATION

Sapkal Knowledge Hub is the manifestation of the vision of its founder Dr. Ravindra G. Sapkal, who had a vision of creating a composite centre of learning where the citizens for tomorrow could be groomed since their formative years itself. Hence, the campus has a provision for kindergarten to post Graduate learning. The academic programmes offered by SKH are comprehensive and continuously being updated to keep pace with latest developments and innovations in associated disciplines with necessary blend of it and Management.

In the vicinity of the quaint and historic old town of Nashik, the campus of Sapkal Knowledge Hub (SKH) sits on a picturesque hillock among the pristine and splendidly beautiful surroundings of Sahyadri Hills at Anjaneri, the birth place of lord Hanuman. Spread over 110 acres, SKH prides itself in having world class infrastructure for being eco-friendly, energy efficient, and naturally lush green and our students find this nurture their 'curiosities' a GURUKULAM in the best sense as applied to those days and times.

SKH has come a long way since its inception in 2005. Within this short span of time, it has emerged as one of preferred destinations for the students in this region by establishing world class institute and creating an academic milieu with an emphasis on human, cultural and ethical aspects of a human being and an aspiration to “groom a talented and diverse student body for a life of purpose, personal fulfilment and the rigors in the life ahead in a caring and enriched environment with the best qualified accomplished and experienced people around them”.

Sapkal Knowledge Hub includes Orchid International School, K. R. Sapkal College of Management Studies, Late G. N. Sapkal College of Engineering, R. G. Sapkal College of Pharmacy and R.G. Sapkal Institute of Pharmacy. All the colleges are always trying to expose the students to the realities of life, in parallel with the curriculum. The students are

learning the way of life through various co-curricular and extra-curricular activities. Any opportunity to participate in social activities and research activities is welcomed and serious participation is ensured by all the colleges. All the colleges are accredited by NAAC.

FUNDS MANAGEMENT

Funds management process of Sapkal Knowledge Hub is very straight forward. For planned activities, the budget is approved at the start of the academic year. There are regular social activities like assistance to local schools, orphanages, tree plantation etc. Sufficient funds are reserved for social activities which are planned. Still additional provision is kept for few additional social activities which may suddenly appear. For such events and activities, the respective heads of the institutes have to give details including budget and has to accord sanction. Normally such activities are encouraged and the budget is approved without much corrections.

KUMBH MELA

Kumbh Mela inscribed on the UNESCO's Representative List of Intangible Cultural Heritage of Humanity, is a mass Hindu pilgrimage of faith in which Hindus gather to bathe in a sacred or holy river. Traditionally, four fairs are widely recognized as the Kumbh Melas: the Haridwar Kumbh Mela, the Allahabad Kumbh Mela, the Nashik-Trimbakeshwar Simhastha, and Ujjain Simhastha. These four fairs are held periodically at one of the following places by rotation: Haridwar, Allahabad (Prayaga), Nashik district (Nashik and Trimbak), and Ujjain. The main festival site is located on the banks of a river: the Ganges (*Ganga*) at Haridwar; the confluence (*Sangam*) of the Ganges and the Yamuna and the invisible Sarasvati at Allahabad; the Godavari at Nashik; and the Shipra at Ujjain. Bathing in these rivers is thought to cleanse a person of all sins.

At any given place, the Kumbh Mela is held once in 12 years. There is a difference of around 3 years between the Kumbh Melas at Haridwar and Nashik; the fairs at Nashik and Ujjain are celebrated in the same year or one year apart. The exact date is determined, as per VikramSamvat calendar and the principles of Jyotisha, according to a combination of zodiac positions of the Jupiter, the Sun and the Moon. At Nashik and Ujjain, the Mela may be held while a planet is in Leo (Simha in Hindu astrology); in this case, it is also known as Simhastha. At Haridwar and Allahabad, an *Ardha* ("Half") Kumbh Mela is held every sixth year; a *Maha* ("Great") Kumbh Mela occurs after 144 years.

The festival is one of the largest peaceful gatherings in the world, and considered as the "world's largest congregation of religious pilgrims". There is no precise method of ascertaining the number of pilgrims, and the estimates of the number of pilgrims bathing on the most auspicious day may vary. An estimated 120 million people visited Maha Kumbh Mela in 2013 in Allahabad over a two-month period, including over 30 million on a single day, on 10 February 2013 (the day of Mauni-Amavasya).

KUMBH MELA ON UNESCO'S LIST OF INTANGIBLE CULTURAL HERITAGE

Kumbh Mela, the mass Hindu pilgrimage of faith, has been inscribed on the UNESCO'S Representative List of Intangible Cultural Heritage of Humanity. The Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage under UNESCO inscribed Kumbh Mela at its 12th session at Jeju in South Korea, the External Affairs Ministry said on Thursday.

The UNESCO Convention for Safeguarding the Intangible Cultural Heritage, adopted in 2003, defines intangible cultural heritage as the practices, representations, expressions as well as knowledge and skills that communities, groups and, in some cases, individuals recognise as part of their cultural heritage. According to the ministry, the Intergovernmental Committee observed that Kumbh Mela is the largest peaceful congregation of pilgrims on earth.

ATTENDANCE

In 1903 about 400,000 people are recorded as attending the fair.^[39] During the 1954 Kumbh Mela stampede at Prayag, around 500 people were killed, and scores were injured. Ten million people gathered at Haridwar for the Kumbh on 14 April 1998.

In 2001, more than 40 million gathered on the busiest of its 55 days

According to the Mela Administration's estimates, around 70 million people participated in the 45-day Ardh Kumbh Mela at Prayag in 2007.

The 2001 Kumbh Mela at Allahabad (Prayag) was estimated by the authorities to have attracted between 30 and 70 million people. The estimated attendance for the 2013 Allahabad Kumbh Mela was 120 million.

According to *The Imperial Gazetteer of India*, an outbreak of cholera occurred at the 1892 Mela at Haridwar leading to the rapid improvement of arrangements by the authorities and to the formation of Haridwar Improvement Society.

LOCATIONAL DETAILS

Trimbakeshwar is a city and a municipal council in Nashik District situated at 28 km away from Nashik at the foothills of Brahmagiri hills of Sahyadri ranges. Trimbakeshwar is located at 19.56°N 73.32°E. It has an average elevation of 720 metres (2362 feet).

Vehicles came from three directions to the town, from Nashik, Jawhar and Pahine, as shown in Figure 1.

Figure 1: Entry points to the town

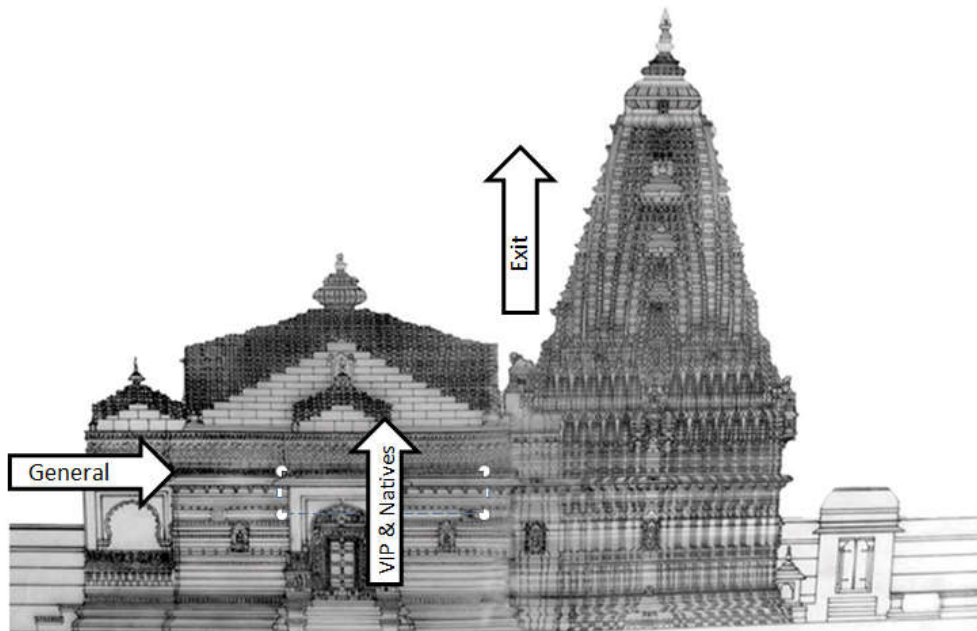


The Shiva-temple is within the Trimbakeshwar town. The temple has three doors. The East (front) door is allotted for general queue; the North (left) door is allotted for VIP and native people of Trimbakeshwar. The South (right) door is for exit only. Please see Figure 2 for the Entry & Exit doors of the temple and Figure 3 for the plan and doors of the temple.

Figure 2: Entry and Exit doors to the temple



Figure 3: Plan of the temple



The pilgrims are entering through these doors forming a queue. The exit gate is common for all.

Kushavarta Teerth is a bathing tank located near the temple. Kushavarta is the place from where the Godavari River takes its course. People believe that a dip in this sacred tank wipes off the sins. This teerth is said to be the spot where Gautam Rishi finally secured the Ganges River on earth by spreading the Kusha or the Darba grass around the river.

The structure around the Kushavarta Teerth was built in the late 18th century by Raoji Abaji Parnekar of the Holkars, the Maratha rulers of Indore. This holy tank has flights of steps on all sides with pillared aisles, and highly ornate arches.

Figure 4: Kushawart Kund



Pilgrims can enter the kund from any side. There is no known pattern of pilgrims spending time at this kund. Many of them take bath into this kund whereas some prefer just to wash legs and hands. Few spend more time, whereas some prefer to rush to the temple for darshan. Thus the pattern of pilgrims here is very ambiguous.

ROLE OF DIVISIONAL OFFICE

As a division of Government of Maharashtra, the Trimbakeshwar Divisional Office is fully responsible for the successful kumbh-mela. The role of Mr. Wakchaure, is to make sure that overall rituals are completed in peaceful manner, law & order is maintained, no chaos, no diseases, no pollution, no missing cases, comfortable for the pilgrims as well as the residents. Communicable diseases pose a threat to global health due to international connectivity, primarily through air travel. Respiratory, faeco-oral, vector-borne, zoonotic, blood-borne and sexual modes of disease transmissions have been identified previously in Mass gatherings. Non-communicable risks, including stampedes, heat-related illness, accidents and terrorist attacks, also pose complex public challenges including crowd control, management of health services and public security. Stampedes have been a common occurrence and have been reported many in the past.

The dilemma in front of the local management was whether law and order will be maintained on all the important days (called as *parvani*) and all the holy events will be conducted in silence. Management question was to identify the days of *parvani*, know all the holy events during those days, forecast the population attending those events and functions, how to define routes for holy-rallies so that there will not be any chaos, stampede, traffic congestion, and parking arrangements for the vehicles coming from outside of the city etc. Further, all the necessary temporary infrastructure like roads, electricity, sheds, toilet and sanitation, water supply, public announcement, mobile towers, sign boards and road maps, CCTV point, watch towers, police control rooms, medical assistance rooms, ambulance, fire-extinguishers and other disaster management arrangements, Barricading – that to be fixed and movable, were need to be planned and erected. It's almost like setting up temporary new city for the period of two to three months. A lot of micro planning is essential to make the event successful.

ESTIMATION & CHALLENGES

For all above planning and implementation, to know the probable crowd attending the event, was the key point. 10million people attended the Kumbh-mela at Haridwar in 1998, 40 million in Nashik in 2001, whereas 120 million in Allahabad in 2013 over 2 months and 30 million on a single day.¹ So it was crucial to know the population that attended the event last time, the increase in total population in the country and accordingly additional population that will attend the events, thus forecasting gross population for the events. Further, the awareness about the event worldwide was to attract additional strength to the event from all over the globe. Increase in transport infrastructure was also crucial factor affecting more population attending the event.

The research question was to map and apprise number of vehicles and in turn population coming from outside of the city. Further to map and apprise number of pilgrims taking bath in Kushawart and taking darshan at temple, the pattern was required. Further, there were hardly 2 days to plan the data collection methods, arrange all the resource and execute the activity. So preparation and execution was major challenge in such a short span. Further, if we fail to

plan and execute the entire activity fruitfully, it would negatively impact not only on the image of the institute but also it can demotivate the students.

THE DISCUSSION

On this backdrop, Dr. Sapkal was having discussion with the heads of all the colleges regarding accepting the proposal. The discussion was taking place on the scope and feasibility of the research work. The major discussion was whether it will be possible to visit the actual place and understand the realities, plan the data collection method, resource planning and execution in such a short span of 2 days. If accepted, where to measure – all entry points, at temple, at Kushawart, what research method to apply, whether same method will be sufficient or different methods are required at different places like entry roads, Kushawart and temple, how much manpower is required, whether some measuring tools and equipments required, were the points of discussion. Further, total estimate and financial estimate for the complete activity were also points of discussion.

Now there is an opportunity to explore more effective mapping tools using emerging technologies like artificial intelligence and data analysis to forecast for upcoming Kumbh-mela in 2026. Further, there is an opportunity to apply artificial intelligence for estimation at the Kushawart Kund, like frame by frame estimation of density. The case can be repeated before each Kumbh-mela applying modern technologies and emerging knowledge.

REFERENCES:

1. Kumbh Mela on UNESCO's list of intangible, Economic Times, 7 Dec 2017
2. Dhande, S., Satpute, G., (2019), *Logical and Structured Estimation Of Mass-Gathering For Effective Management*, Think India Journal, 22(27), 236-250.
3. McLean, Kama. "Seeing, Being Seen, and Not Being Seen: Pilgrimage, Tourism, and Layers of Looking at the Kumbh Mela." (2009): 319-41. Ebscohost. Web. 28 Sept. 2014..
4. K. Shadananan Nair (2004). *Proceedings ol'thc. UNI-SCO/I AI IS/I WI IA symposium held in Rome, December 2003 (PDF). IAHS: 165 http://hydrologie.org/redbooks/a286/iahs_286_0160.pdf. Missing or empty |title= (help)*
5. Maclean 2008, p. 102.
6. *"Kumbh Mela 2015-16: Nashik City" (PDF). Police Commissionerate, Nasik City. 2014.*
7. The Maha Kumbh Mela 2001 indianembassy.org
8. *"Record 120 million take dip as Maha Kumbh fest ends". Khaleej Times. 12 March 2013.*
9. *"Over 3 crore take holy dip in Sangam on MauniAmavasya". IBNLive. 10 February 2013.*
10. *Rashid, Omar (11 February 2013). "Over three crore devotees take the dip at Sangam". The Hindu. Chennai.*

11. K. Khan, J. Sears, V. Wei Hu, J.S. Brownstein, S. Hay, D. Kossowsky, *et al.*, (2013), *Potential for the international spread of middle east respiratory syndrome in association with mass gatherings in Saudi Arabia*, PLoS Curr Outbreaks
12. Olympic Planning Unit National School of Public Health Greece. Mass gatherings and public health: The experience of Athens 2004 Olympic games. Available at: http://www.euro.who.int/_data/assets/pdf_file/0009/98415/E90712.pdf.
13. I. Abubakar, P. Gautret, G.W. Brunette, L. Blumberg, D. Johnson, G. Pomeroy, *et al.* (2012), *Global perspectives for prevention of infectious diseases associated with mass gatherings*, Lancet Infect Dis, 12, pp. 66-74
14. P.G. Greenough (2013), *The Kumbh Mela stampede: disaster preparedness must bridge jurisdictions*, BMJ, 346, p. f3254
15. Sridhar, S.; Gautret, P.; Brouqui, P., (2015), *A comprehensive review of the Kumbh Mela: identifying risks for spread of infectious diseases*, Clinical Microbiology and Infection, Vol. 21, Issue 2, Pages 128-133.

Authors:

- Prof. Dr. Suhas B. Dhande¹
- Dr. Gayatri S. Satpute¹
- Anurag S. Dhande²

1. K.R. Sapkal College of Management Studies, Savitribai Phule Pune University
2. VJTI, University of Mumbai

----- 0 -----