

Siddheshwar Temple Yatra, Solapur PMU Field Visit Report

Date: 12th-14th January 2024

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1. Introduction:

Organized every year during Makar Sankranti, the Siddheshwar Temple Yatra at Solapur is one of the prominent events in the cultural calendar of Maharashtra. Centred around the Shri Siddheshwar Devasthan, the *Gramdaivat* or the guardian deity of Solapur, this Yatra celebrates a story in the life of Saint Shri Siddharameshwar. The legend goes that Kumbhar Kanya, a young girl, was inspired by the teachings of Shri Siddharameshwar and expressed a desire to marry him. However, being a celibate, the saint declined the proposal and asked her to marry his **Yoga Danda** (holy wand). Through the rituals, the Yatra commemorates and celebrates the wedding, where the *Nandi Dhwajas* (decorated bamboo poles) representing the bride and the groom are taken out in a procession on the first day, followed by the subsequent day. On the third day, the Yatra commemorates the Kumbhar Kanya's plunge into the holy fire as a *Sati* through the *Homa* (sacred fire) ceremony. On the fourth and fifth day, the Yatra makes way for the *Jatra* (a fair) with a display of food stalls, games, and entertainment rides.



Figure 1: Sanctum Sanctorum of Siddheshwar Temple, Solapur, Maharashtra

This year, the Yatra was organized from January 13 to January 16. It began with the **Nandi Dhwajas** procession on the first day, followed by the **Akshata Sohala** and the **Homa** ceremony on the second and third days. The **Jatra** commenced on the evening of January 14 and continued for the next two days till the 16th.

Close to two lakh devotees travel to Solapur during the Yatra, with a vast number from neighbouring districts of Karnataka and a substantial number from Telangana and Andhra Pradesh. Natives of Solapur settled in various parts of Maharashtra pay a visit to the city during this period. The Siddheshwar Temple is sacred to the Lingayat and the Veershaiva communities across the country, though people in Solapur across castes and religions express their faith in the deity.

While the **Nandi Dhwajas** procession involves a moving crowd of close to five thousand devotees, it is the **Akshata Sohala** that attracts the maximum crowd of close to two lakh pilgrims, with most of them stationed inside the temple premises during its proceedings.

The **Jatra** attracts thousands of visitors over its three-day period. Against this backdrop, the District Administration must implement best practices for crowd management from both the perspectives of law and order and the prevention of stampedes.



Figure 2: Aerial image of Siddheshwar temple and the surrounding lake.

2. Purpose of the Study

Maharashtra has experienced a growing number of stampedes over the years owing to population growth, rapid urbanization, and many events and locations where large crowds gather, such as religious sites, shopping malls, railway stations, etc. According to data from the National Crime Records Bureau (NCRB), the state accounted for the highest number of casualties (368) due to stampedes between 2001 and 2015. The major stampede incidents in the state are summarized in the table below:

S.No.	Incident	District	Date	No. of Casualties (approx.)	
				/	

1.	Nasik Kumbh mela	Nasik	27 August 2003	39
2.	Mandhar Devi stampede	Satara	25 January 2005	293
3.	Malabar Hill	Mumbai	18th January 2014	18
4.	People falling off the narrow Dadar railway platform	Mumbai	2016-2020	30
5.	Footbridge collapse between Parel & Elphinstone Road railway stations	Mumbai	29 September 2017	23

Although stampede is not yet on the list of notified disasters in the state, stampede and crowd mismanagement-related incidents have increased manifold. Given the context, there is an urgent need to notify stampede as a disaster at the state level.

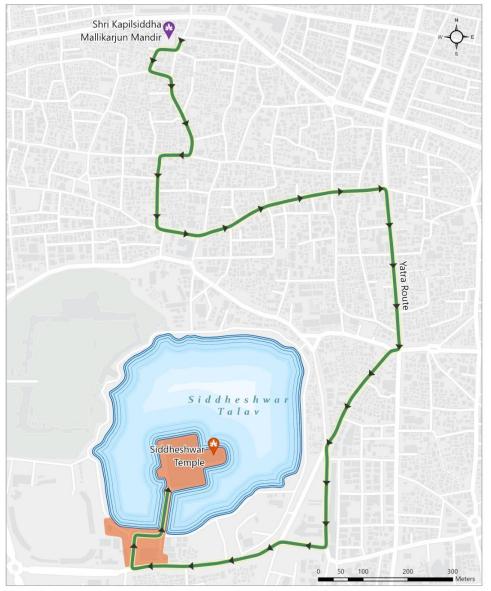
The documentation of this event through firsthand experience has provided insights into good practices associated with crowd management. Additionally, the PMU is supporting the State Government in notifying the stampede as a state-level disaster by publishing a Gazette Notification, thus making it critical to understand the local scenarios and contexts in Maharashtra. Apart from this, the findings from this study could facilitate the lessons learned and the use of good practices if similar events are planned in other parts of the state.

With these objectives, a team of two members from the Project Management Unit visited Solapur from January 12 to January 14 to observe and understand the arrangements made for the Yatra based on crowd management, inter-departmental coordination, communication efforts and the good practices that could be replicated elsewhere.

3. Site Description and Analysis:

The PMU Team visited the Siddheshwar Temple Yatra and investigated the following sites for understanding and analysing the Crowd Management practices adopted during the cultural-cum-religious festival.

1. The Nandi Dhwajas procession:



Nandi Dhwajas Procession Route

The Siddheshwar Temple Yatra commences with a procession involving Nandi Dhwajas. The procession begins from the Mallikarjun Mandir and advances to the Siddheshwar Temple for the first Shivalinga's Tel Abhishek. It later covers the remaining sixty-seven throughout the city before returning to its site of origin. The procession begins around nine in the morning, and the first day ends by eleven at night. People join the Yatra at multiple locations and walk a distance to express their support and devotion, making the route densely crowded in a few places and sparse in the rest.

Figure 3: Map showing the Nandi Dhwajas Procession Route

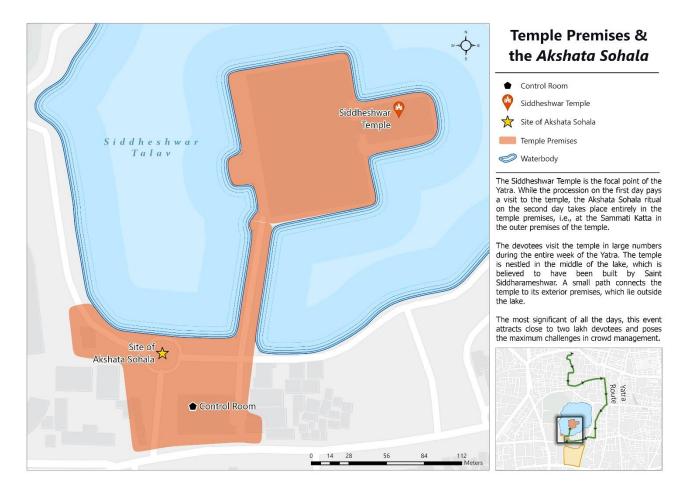
The Siddheshwar Temple Yatra commences with a procession involving *Nandi Dhwajas,* i.e. the decorated bamboo poles representing the bride and the groom. Seven *Nandi Dhwajas,* representing seven different communities, are taken out in a procession throughout the city, and members from these communities conduct the *Tel*

Abhishek (pouring of oil) of sixty-eight Shivalingas, believed to have been installed by Saint Siddharameshwar. The procession begins from the Mallikarjun Temple and advances to the Siddheshwar Temple for the first Shivalinga's Tel Abhishek. It later covers the remaining sixty-seven throughout the city before returning to its site of origin. The procession begins around nine in the morning, and the first day ends by eleven at night. The devotees who accompany the Nandi Dhwajas are called Barabandis, and they wear a white dress and turban and walk the entire route barefoot. People join the Yatra at multiple locations and walk a distance to express their support and devotion, making the route densely crowded in a few places and sparse in the rest.

The procession takes place mainly through the narrow residential lanes of Solapur, making it prone to hazards of a large crowd. The width of the road is as short as six feet in some places, making it a chokepoint for the moving crowd. Multi-storeyed buildings lie on both sides of the road along with electrical poles & wires. The *Nandi Dhwajas* almost fell on these buildings and electrical wires at multiple points during the procession. Closer to the temple, the route mainly comprises commercial areas with wide roads and sufficient space for the crowd to move. The Solapur Municipal Corporation made special arrangements to reduce the number of vehicles on this route for ease of movement during the procession.



Figure 4: Nandi Dhwajas Procession, Siddheshwar Yatra Day-1



2. Temple premises and the Akshata Sohala:

Figure 4: Map showing the temple premises and the site of Akshata Sohala event.



Figure 5: Akshata Sohala event at Siddheshwar temple premises.

The Siddheshwar Temple is the focal point of the Yatra. While the procession on the first day pays a visit to the temple, the *Akshata Sohala* ritual on the second day takes place entirely in the temple premises. Later, the third day includes a procession from the temple to the *Hom* ground, where the Yatra transits into the fair or the *Jatra*. Besides this, devotees visit the temple in large numbers during the entire week of the Yatra. The temple is nestled in the middle of the lake, which is believed to have been built by Saint Siddharameshwar. A small path connects the temple to its exterior premises, which lie outside the lake.

The *Akshata Sohala* is where the marriage ritual of Saint Siddharameshwar's *Yoga Danda* (represented by the *Nandi Dhwajas*) with the Kumbhar Kanya (the young girl) is celebrated by sprinkling uncooked rice grains (*Akshata*) on the symbolic bride and the groom. This ritual takes place between 12 and 1 in the afternoon at the *Sammati Katta* in the outer premises of the temple.

The most significant of all the days, this event attracts close to two lakh devotees. The large crowd, coupled with the time of the event (close to noon) and the venue's limited space, poses the maximum challenges in crowd management. Approximately one-third of the seating space is located on a medium slope, posing a crowd risk. Additionally, the seating space is not covered by any shade, which poses a risk for heat-related illnesses and makes for an uncomfortable experience for the devotees. In any medical emergency, moving in the seating area towards the exits during the event is difficult, as there is no buffer space. Hence, the restricted movement also poses an element of risk.

3. Hom Ground and the Jatra

Hom Ground & The Jatra

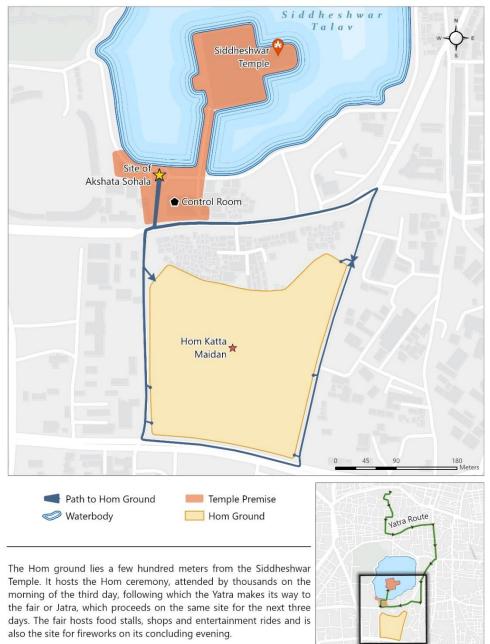


Figure 6: Map showing the Hom Ground where the Jatra is held.

The *Hom* ground lies a few hundred meters from the Siddheshwar Temple. It hosts *the Hom* ceremony, the symbolic representation of the Kumbhar Kanya's (the young girls) plunge into the holy fire as a *Sati*. Thousands attend this ritual on the morning of the third day, and the Yatra makes its way to the fair or *Jatra*, which proceeds on the same site for

the next three days. The fair hosts food stalls, shops and entertainment rides and is also the site for fireworks on its concluding evening.

The entertainment rides in the fair were placed very close to each other, with minimal buffer space (approximately 3 feet). The walking paths were cluttered, with people walking in multiple directions. The exits needed to be marked, and the lack of signage led to people moving in various directions.



Figure 7: Aerial image of Hom Ground displaying stalls and entertainment rides.

The PMU observed that the crowd on the first and the third day (*Nandi Dhwajas* procession and the *Hom* ceremony) is mobile, whereas it is static on the second (*Akshata Sohala*). However, due to the sheer number of devotees, the second day poses maximum challenges in crowd management. This visit also presented the PMU an opportunity to study the coordination between the District Administration of Solapur, the Municipal Corporation of Solapur, and Shri Siddeshwar Devasthan in organizing the Yatra.

4. Preparations by Siddheshwar Devasthan, Solapur District Administration and Solapur Municipal Corporation

The Siddheshwar Devasthan, Solapur District Administration, and Solapur Municipal Corporation (SMC) work in partnership to organise the annual event of the Siddheshwar Temple Yatra. In the 2024 edition, for the very first time, the Solapur District Administration used the Incident Response System (IRS) to manage the event.

The National Disaster Management Authority (NDMA) has instituted the IRS mechanism to manage the disaster management response phase effectively and reduce ad-hoc measures. This mechanism defines a team with various sections based on different functions. Officers within various sections are assigned their respective duties and oriented on them. The activities undertaken are documented for better planning, accountability, and analysis, which helps reduce chaos and confusion during the response phase. The broad template of the IRS is represented in the figure below. However, it is essential to note that it is need-based and adapted to the ongoing situation as required.

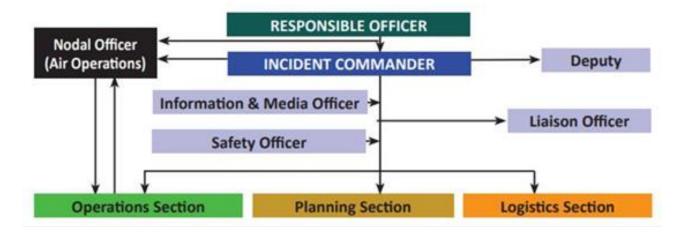


Figure 8: Broad template of Incident Response System (NDMA, 2014)

The Responsible Officers (ROs) are responsible for incident response management at the state and district levels. As per the above figure, the Responsible Officer may delegate responsibilities to the Incident Commander (IC), who will manage the incident through Incident Response Teams (IRTs). IRTs are pre-designated at the state, district, and subdistrict levels. On receipt of early warning of any oncoming hazard, the corresponding Responsible Officer activates them. Given the large crowd expected in any mass gathering event, the NDMA has advised the proactive deployment of the IRS in the planning and implementation of the event.

On the direction of the Solapur Resident District Collector, the Sub-Divisional Officer was appointed as Incident Commander (IC) to oversee the arrangements for the event and coordinate with all concerned stakeholders. In follow-up to this, the IC appointed three Tehsildar officials as Deputy Incident Commanders (DICs) for the corresponding three main sectors of the event –

- 1. Siddheshwar temple and its premises,
- 2. Entire Hom Ground and its premises, and
- 3. Nandi Dhwajas procession route and its premises.

For ease of coordination between the government stakeholders and the Devasthan, the IC asked the Devasthan to appoint three sub-committees with a nodal person for each sector, whose name and contact details were shared with the government.

Further, the IC, in consultation with the Devasthan and government departments, developed and issued an Action Plan which listed the roles and responsibilities of all stakeholders as listed below:

- 1. Siddheshwar Devasthan
- 2. Police Department
- 3. Solapur Municipal Corporation (SMC)
- 4. Public Works Department (PWD)
- 5. Maharashtra State Electricity Distribution Company Limited (MSEDCL)
- 6. Bharat Sanchar Nigam Limited (BSNL)
- 7. Food and Civil Supplies
- 8. Food Grains Distribution Office
- 9. Sub-Regional Transport Office (SRTO)
- 10. Maharashtra State Road Transport Corporation (MSRTC)
- 11. State Excise Department

- 12. District Civil Surgeon
- 13. District Medical Officer Zilla Parishad
- 14. Dr. V. M. Government Medical College
- 15. Legal Metrology Department
- 16. Food and Drug Administration
- 17. Maharashtra Pollution Control Board (MSCB) Sub-Regional Office
- 18. Home Guards Department
- 19. Information Department
- 20. Anti-Encroachment Office
- 21.Red Cross Society
- 22. District Disaster Management Authority (DDMA)
- 23. Electrical Inspector Industries, Energy & Labour Department

Thereafter, the IC and DICs instituted function-wise sections (as per Table 2) to develop a Standard Operating Procedure (SOP) and CPM PERT chart of all tasks under their respective jurisdiction and manage the event.

TABLE 2: SECTION-WISE DESIGNATION OF RESPONSIBLE OFFICIALS

S. No.	Section	Sub-Section	Responsible Official
	Planning	Law and Order, Transport, Food and Medicines, etc.	 Deputy Police Commissioner Sub-Regional Transport Officer Joint Commissioner, Food and Drug Administration Office
1		Electricity	 Executive Engineer City, MSEDCL SMC Executive Engineer Electricity
		Health	 SMC Medical Officer Resident Medical Officer, District Surgeon's Office
		Telecommunication	Area Manager, BSNL

			1
	Environment Disaster Management		 SMC Environment Officer Deputy Regional Pollution Officer, Solapur
			SMC Deputy CommissionerSMC Junior Engineer
		Drinking Water	SMC Executive Engineer Water Supply
		Construction	Executive Engineer, PWD
2	Safety		 Deputy Police Commissioner SMC Superintendent Fire Brigade
3	Operations		 Solapur Additional Collector Assistant District Supply Officer Circle Officer – D Division
4	Liaising		 Tehsildar District Rehabilitation Office Tehsildar Kada
5	Administration		Deputy Tehsildar South SolapurCircle Officer B Zone
6	Intelligence		 Inspector of Police, Special Branch, Solapur Police Commissionerate
7	Logistics		 Assistant Foodgrains Distribution Officer Circle Officer C Zone

In the fortnight preceding the event, the IC issued instructions to various stakeholders via Government Resolutions (GRs). Nodal persons from each coordinated with the IC and reported on the status of the tasks assigned.

The IC held three review meetings (28 Dec, 8 Jan, and 12 Jan) with the nodal persons, in which stock-taking was done to ensure that various stakeholders implemented the tasks outlined in the Action Plan. Physical inspections were also done to oversee the status of tasks, and lacunae found were directed to be corrected by the IC.

5. Establishment of EOC/Control Room

The IC directed the Devasthan regarding establishing two EOCs – one in Yatri Niwas, overlooking the *Akshata Sohala* venue and the other inside the *Hom* Ground premises. The respective EOCs were arranged in a room inside the *Yatri Niwas* and the pavilion space inside Hom Ground, where supporting facilities such as electricity connection, IT equipment, CCTV, communication equipment, tables, chairs, and drinking water were provided. The deputy ICs were directed to be present at their respective EOCs and coordinate on all days of the Yatra. To support them, the IC appointed staff at EOCs on an 8-hour shift basis from 12 Jan-16 Jan for five days.

6. Special measures for Crowd Control

- Although the Akshata Sohala event site is used as a parking space at regular times, for the duration of Yatra, the administration declared it a No Parking Zone. It made special Pay and Park arrangements at the Hom Ground and Haribhai Devakaran School premises.
- Barricades were placed on the above site to create spaces for seating and walking paths. Separate seating spaces were demarcated for men, women and the *Barabandis*. A different evacuation route was also established for the safe movement of VIPs.
- The alternate gate of the Temple, on the Lakshmi market side, was opened for the devotees' ease of movement.
- LED screens were installed outside the temple premises for the event's live broadcast to reduce the crowd inside the *Akshata Sohala* site. The administration also arranged for clear viewing of the event from the open seating area of the Nirmalkumar Phadkule Auditorium, which overlooks the *Akshata Sohala* event site. The corrugated GI sheet barriers were removed from the boundary of the auditorium, and temporary bamboo barricades were placed for the safety of viewers.



Figure 9: LED screen installed outside the Temple premises for live broadcast of Akshata Sohala event.

- CCTV cameras were installed strategically to cover all areas, including temple premises, the Hom Ground and parking spaces. The EOCs monitored the CCTV footage, and crowd movement was filmed to ensure no stampede-like situation occurred.
- Special traffic management measures were implemented to ensure the smooth movement of vehicles around the temple premises and Hom Ground. These included:
 - Restriction of unauthorized vehicles near the Yatra event sites,
 - Moving the rickshaw point in the area near the temple premises.
 - Deployment of additional MSRTC and city buses for the Yatra attendees
- Walkie-talkies were provided to ensure smooth communication among the deputy ICs and those deputed to the EOCs.

- To ensure seamless communication during the Akshata Sohala, the administration used the Public Address system to disseminate information to the devotees and kept it as a backup for issuing emergency announcements.
- As per requirement in each site, police officials were deployed to cover all areas. Additional support was provided by Home Guards and NSS volunteers, who worked in tandem with the Police to control the crowd and aid devotees as required. The NSS volunteers from nearby colleges of Solapur were oriented on their duties and provided with special dress codes and identity cards.



Figure 10: A group of NSS volunteers deployed outside the Gate of the Akshata Sohala event

- The stalls on the Hom Ground underwent structural mapping, and the administration issued permits on this basis.
- The administration repaired the roads in the periphery of the temple premises and those leading to it. It was followed by removing encroachments and restricting roadside shops and stalls. A separate hawkers' zone was set up to avoid crowding the roads near the temple premises and Hom Ground.
- The administration chose an independent route for the march involving sacred animals during the *Nandi Dhwajas* procession to avoid any stampede-like situation.

- A dedicated emergency corridor, free of all obstructions, was maintained near the temple premises between the Hom Ground and the Old Collectorate, leading from the Marketplace Chowki to the New Administrative Building next to Haribhai Devakaran School.
- The administration undertook several special security measures to reduce the risk of criminal incidents in the large crowd. They were as follows:
 - The police officials from the District Special Branch and the anti-accident team inspected the temple premises, Hom Ground, and the Nandi Dhwajas procession route.
 - To prevent anti-social actions, the administration deployed local crime branch professionals during the procession and the queues of devotees during the Darshan.
 - Police checkpoints were installed at important places, and well-equipped police officials were deployed to man these checkpoints.
 - Anticipating security-related incidents, the administration prepared an action plan, where every stakeholder was briefed, followed by a mock drill.
 - A temporary tower pavilion was set up as a vantage point near the entrance to the Akshata Sohala site to monitor the crowd movements and prevent any criminal activity.
 - The Police Department closely coordinated with every stakeholder, including Devasthan, government departments, Gram Panchayat / Municipal Members, District Home Guards and Non-Governmental Organizations during the Yatra.



Figure 11: Police and other security personnel deployed at the site of Akshata Sohala event.



Figure 12: Police personnel deployed along with the Nandi Dhwajas Procession



Figure 15: Tower Pavilion set up as vantage point to monitor crowd movement at entry gate of Akshata Sohala event.

7. Safety Measures Against Secondary Hazards

- The administration barricaded the lake shoreline to prevent drowning incidents due to crowd surges. It also deployed an emergency boat with a Search and Rescue team of six members.
- Considering medical emergencies, the administration arranged for two pavilions with seating arrangements inside the temple premises and the Hom Ground, along with the deployment of medical and paramedical staff. It also placed ambulances at a dedicated space inside the Hom Ground.



Figure 13: Ambulances stationed inside the Hom Ground

- As a preparedness measure for fire-related hazards, fire-fighting vehicles were placed inside a dedicated space on the Hom Ground. The administration issued directives to burst firecrackers at a safe distance from the fair.
- To reduce the risk of electrical hazards, the measures undertaken were as follows:
 - Installation of the supply board at a safe location,
 - Inspection of electrical connections and open wiring.
 - Periodic inspection during the fair to check for unauthorized electrical connections.
- To prevent slipping over coconut water and oil, the administration created a separate space for breaking coconuts and rituals involving oil. This space remained independent of the devotees' walking paths.
- The administration inspected the entertainment rides and verified their safety to ensure any untoward accidents due to their malfunction.

- The administration levelled the Hom Ground to avoid mishaps from scattered pebbles and stones. Similarly, the Nandi Dhwajas procession route was cleaned and repaired to prevent accidents from untoward objects lying on the ground.
- Anticipating soil erosion due to the presence of many people on the Hom Ground, the administration undertook the following measures to prevent dust pollution:
 - Laying of mats in and around the stalls,
 - Sprinkling water on the ground,
 - The layering of sand on the ground
 - Installing instruments to monitor the level of dust in and around the Hom ground.
- Anticipating a rise in noise pollution during the fair, the administration ensured sound levels did not exceed the prescribed limit and prohibited using loudspeakers after 10 pm.
- The administration maintained a list of food vendors along with their addresses to avoid cases of food poisoning and maintain a check on food adulteration. It also ensured that only licensed food stalls occupied the ground during the fair.
- The administration pruned the tree branches to prevent their entanglement with the elevated Nandi Dhwajas during their procession.
- To prevent accidents and injury to devotees, the administration ensured stray animals didn't enter the temple premises and the Hom.
- The administration placed additional garbage bins in the temple premises and the Hom ground to ensure cleanliness and solid waste management. It attempted to segregate wet and dry waste and undertake periodic collection to achieve efficiency.
- The administration ensured additional illumination of roads near the temple and the lake premises and the Hom ground to prevent accidents due to poor lighting.

8. Information, Education and Communication (IEC)

It is critical to acknowledge Solapur's linguistic background before developing communication strategies to influence crowd behaviour positively. The Solapur district borders the state of Karnataka and lies close to the Telangana state. Cultural similarities with the neighbouring districts of these two states have created a tri-linguistic blend of Marathi, Kannada, and Telugu in Solapur. As the Yatra attracts most devotees from neighbouring Karnataka and a significant number from the Telugu-speaking states, a tri-lingual communication strategy can most effectively contribute to positive crowd behaviour.

On the contrary, dissemination of information at every site, from the entire route of the **Nandi Dhwajas** Yatra to the temple premises and the **Hom** ground, took place only in Marathi. While banners or signages were absent on the route of the Yatra, they had a meagre presence on the temple premises. Moreover, the boards and signages on the temple premises directed the devotees to the sanctum sanctorum; they did not display any appeals or instructions to prevent a stampede-like situation. There were no signages indicated entry and exit points in the temple premises and the Hom Ground, including direction signs for the crowd's movement.



Figure 14: Public Announcement system and Signage indicating separate entry for Barabandis.

Anticipating a crowd surge on the day of the **Akshata Sohala**, the temple administration broadcasted pre-recorded audio messages urging people to leave the sanctum after the **Darshan** to avoid crowding. However, these broadcasts were only in Marathi, and there was no similar broadcast in Kannada or Telugu. Moreover, the broadcast happened only in the main temple complex and was completely absent in its outer counterpart.

Two LED screens were mounted close to the site of the *Akshata Sohala*, and they displayed the live broadcast of the proceedings for devotees who sat cross-legged on the floor. A few such screens were mounted on the main road outside the temple, catering to the crowd of devotees outside the temple premises.

9. **Good Practices**

- 1. The Siddheshwar Temple installed 32 CCTV cameras on the temple premises and 40 more such cameras outside the Temple and in the *Hom* ground to ensure the safety and security of the site. These cameras also helped the organizers monitor the parking facility near the *Hom* ground and the Haribhai Devakaran school, located a few hundred meters from the Temple.
- Local media outlets like IN Solapur News, DEN, Samrajya, Swarajya and Vruttavedh were roped in to broadcast the proceedings of the Yatra on their television channels. IN Solapur expanded its outreach by broadcasting the proceedings via its YouTube and Facebook platforms.

Similarly, Solapur Aakashwani broadcasted a live audio commentary of the *Akshata Sohala* to devotees across the district. Both these measures were proactively planned to ensure virtual access to the event to devotees in Solapur city so that they did not crowd the temple premises during the event proceedings.

To manage the large crowd of devotees that had gathered outside the temple premises to witness the *Akshata Sohala*, the administration mounted 8 LED screens at multiple locations to the *Hom* ground (almost four hundred meters from the ritual

site). Virtual access to the event prevented their advance towards the temple premises.

- 3. A press conference involving the state and local-level print and electronic media representatives was organized in the temple premises a day before the commencement of the Yatra. The temple administration followed it by sharing a comprehensive press note with the journalists mentioning the schedule of the Yatra and the measures undertaken for its smooth operation. It allowed the media representatives to publish or broadcast these details on the respective platforms well in advance.
- 4. The Akshata Sohala is when the Temple attracts close to two lakh devotees, who sit cross-legged around the ritual site to witness the proceedings. To ensure efficiency in seating, the Temple administration, at the behest of the district administration and the police administration, set up barricades where the Barabandis were seated closer to the ritual site, separated from the usual temple visitors. An ambulance was stationed a few feet from the ritual site inside the temple premises, and another was deployed outside. Both the ambulances were equipped with first aid facilities.
- 5. As the Nandi Dhwajas, the decorated bamboo poles carried manually during the procession on the first day, are close to 18 feet tall, they could get entangled in tree branches and electric pole wires. The Solapur District administration and the Municipal Corporation ensured the trimming of tree branches and an examination of electric pole wires well in advance to avoid a potential hazard. However, during the procession, the PMU observed that the Nandi Dhwajas were likely to get entangled with the low-hanging electric wires on both sides of the roads.
- 6. The Incident Commander assigned Deputy Incident Commanders (DICs) to three sites: the *Nandi Dhwajas* Yatra route, the Siddheshwar Temple premises, and the *Hom* ground. Similarly, the Temple Committee was asked to assign a nodal officer for each site to ensure better coordination with the DICs. The Deputy Incident Commanders also supervised the Emergency Operation Centres set up in the

Temple premises and the *Hom* ground. A decentralized approach to disaster management was seen where every site of the Yatra received independent attention.

- 7. Anticipating a large crowd during the fair, the District Administration and the Municipal Corporation tried flattening the *Hom* ground a few weeks before the commencement of the Yatra and ensured the ground got rid of pebbles and small stones, which could have caused injury to the devotees. Additionally, mats were rolled on the site of the food stalls and entertainment rides to provide soil erosion protection.
- 8. Student volunteers representing multiple colleges through the National Service Scheme played a crucial role in managing the crowd during the *Akshata Sohala*. While the usual temple visitors were allowed to enter the temple before the *Akshata Sohala*, there were strict instructions to bar their entry after it began. This step was crucial to prevent crowd surges and avoid chaos. The student volunteers guarded the main barricade at the temple entry and guided the devotees through the entry and exit points of the temple. The police department oriented these volunteers and offered their assistance during the event.



Figure 15: Press conference organized by the Siddheshwar Devasthan, on the day prior to the start of the Yatra.

10. Learnings and the Way Forward:

 Owing to its proximity to the Karnataka border and the state of Telangana, Solapur offers a confluence of Marathi, Kannada, and Telugu. As most devotees travelling to the Yatra hail from Karnataka, followed by a significant number from Telangana, the organisers should implement a tri-lingual communications strategy for crowd management.

Moreover, the Kannada-speaking population in Solapur can read the Marathi (Devnagari) script owing to their state domicile. But this phenomenon reverses as we cross the border where the Marathi-speaking population is familiar with the Kannada script. To solve this problem, the Temple administration should emphasise audio announcements, albeit in three languages. As the crowd surge is the maximum on the *Akshata Sohala*, where the rituals involve almost two lakh devotees on the temple premises, using an all-inclusive dissemination strategy is necessary.

2. During the *Akshata Sohala*, barricades are erected to segregate the temple visitors from the *Barabandis* to ensure convenience in the seating arrangement. Multiple barricades on the ground create clusters of devotees, who sit cross-legged and witness the rituals. While this is a good practice to avoid stampedes, it should be supplemented by mineral water, medicines, and glucose biscuits/drinks within each cluster to ensure faster access to first aid in an emergency.

Moreover, the erected barricades restrict the movement of people and resources, and a prospective patient's access to an ambulance could take longer than usual. Against this backdrop, quicker access to first aid facilities is critical.

3. While the control room in the temple premises is proactive during the *Akshata Sohala,* the live feed on the CCTV only displays the ritual site. Consequently, the control room needs more visual access to the other parts of the temple premises, which are equally crowded and prone to risk. Drones can be utilized for better aerial monitoring of the event and the drone imagery can also be used later for crowd analysis for planning of next event.

- 4. The Akshata Sohala takes place between 11 am and 2 pm, thus directly exposing close to two lakh people to the solar noon. Likely, many devotees consume food or the *Prasad* only after the event, and prolonged exposure to sunlight without food and water could lead to dehydration, heat exhaustion or a stroke. Moreover, as the maximum temperature in Solapur during the Yatra (January 13 to January 16) crosses 30 degrees Celsius, erecting a Pandal and stocking up on essential medical supplies such as ORS within each barricaded seating enclosure will go a long way in preventing heat-related illnesses.
- 5. Even before the *Akshata Sohala*, many devotees assemble inside the temple premises near the Sanctum Sanctorum for the *darshan* and queue up to the nearby small building to access the *Prasad* meal. However, as the building hosts approximately 80 devotees at a time and considering the ten to fifteen minutes taken to eat the meal, the access to food for those waiting in the queue gets prolonged. As most devotees do not eat anything before the *prasad*, this system delays their access to their first meal. The temple administration should consider packing the *prasad* meal and handing it to the devotees for faster queue movement. It will also ensure quicker access to the day's first meal for many devotees.
- 6. The PMU observed that only one motorboat was arranged for the event and considering the presence of close to two lakh devotees during the Yatra, the number should be higher. The need for more motorboats became more pronounced when one of the PMU members boarded it to examine the drowning preparedness measures, and the boat broke down in the middle of the lake, leaving everyone on board stranded. Finally, the boat was rowed manually to the temple premises, raising concerns about the time a manual operation would take to rescue a drowning victim.
- 7. The PMU spent some time on the *Hom* ground, which was the site of the fair or the *Jatra*. It was observed that the entertainment rides needed more space between them, and there was no visible firefighting equipment or food stalls near them. Further, despite a fire brigade and ambulance on the ground, parked vehicles had blocked their way, thus risking delayed action in case of an emergency.

8. Although the administration made systematic efforts to have coherent management of the event through close coordination of the stakeholders, mainly Devasthan and the government departments, there was a visible disconnect between them during the event. For the same, the administration should conduct a mock-drill of the event with the Responsible Officials from the IRS structure. This will facilitate better communication among them prior to the event.

11. Conclusion:

The Project Management Unit (PMU) spent three days with the Trustees at the Siddheshwar Devasthan and simultaneously interacted with Shri Sadashiv Paddune, Sub-Divisional Officer-2, Solapur and Shri Shaktisagar Dhole, District Disaster Management Officer, Solapur. While the PMU spent the first day understanding the significance of the event and its preparedness measures, the second and third days offered a direct experience of the Nandi Dhwajas procession and the Akshata Sohala. The PMU felt that as a primary organizer, the Siddheshwar Devasthan still relies on established crowd dynamics and historically ingrained crowd patterns. While it is true that devotees who visit Solapur for the Yatra are familiar with every ritual, and the first timers among them often follow the footsteps of their experienced counterparts, reliance on this phenomenon is detrimental to crowd management. Hence, a more nuanced approach consisting of advanced preparation and anticipation of primary and secondary hazards is expected from the Temple management and the district and city-level administrators.

12. Way Forward:

Maharashtra possesses a rich and diverse religious and cultural tapestry, reflected in the places of worship, festivals, pilgrimage sites and cultural gatherings that have formed a part of its historical traditions. Additionally, being industrialized and economically vibrant, the state is experiencing fast-paced urbanization and increased population density in its urban areas. Crowded places like bus stops, railway stations, shopping malls in cities like Mumbai, Pune and Nagpur could create a stampede-like situation every day. Hence, failure to manage these large crowds would increase its risk, possibly leading to the loss of life and causing a strain on the state's administrative resources. Advanced preparedness strategies and measures to mitigate a potential stampede will help the state prevent its likelihood and alleviate its effects.

However, a rise in the number of stampedes in Maharashtra over the years underlines the need for the state to notify it a state-level disaster.

The PMU understands the need to document state-specific examples of managing large crowds, study the good practices followed at these places, and implement them in other parts of the state as part of preparedness and mitigation measures to avoid a potential stampede. This exercise will contribute to the Project Management Unit's support to the State Government in publishing a Gazette notification and declaring stampede a state-level disaster. This step would also enable Maharashtra to utilize the State Disaster Response Fund to provide immediate relief to people affected by the stampede. Additionally, the state government could use this fund for generating awareness for stampedes. Further, the PMU suggests using the Incident Response System (management tool) at every level of administration for planning and managing large-scale community events, which would reduce the likelihood of secondary hazards associated with these types of events. The documentation of the Siddheshwar Temple Yatra, one of Maharashtra's most prominent religious gatherings, is a step in this direction.

Annexure:

Questionnaire for the documentation of the Siddheshwar Temple Yatra

- 1. What is the crowd composition at the event? Does the event involve specific castes, communities, or religious groups?
- 2. Please give us the details of the event, with its brief history and the every-day schedule.
- 3. Who are the key stakeholders involved in the planning and the administration of this event? Can you share their roles and responsibilities?
- 4. Could you share the details of the setting up of the Incident Response System?
- 5. How do people reach the venue? Do they use local transportation?
- 6. What is the arrangement of parking spaces for the event? Could you elaborate on the traffic management before, during and after the event?
- 7. Does the crowd management include special provisions for different-abled populations and vulnerable groups like women and children?
- 8. Who are involved in the planning and management of the event? How many departments in the district are involved?
- 9. Is there adequate preparation if there is a sudden crowd surge? Does the event guarantee the arrangement of police forces and stocking of essential facilities?
- 10. How is the security arrangement for the event? Are they prepared for a terrorist attack, or a riot?
- 11. Are the street vendors and hawkers during the event registered? Does the administration know what each hawker or street vendor is selling?

- 12. Does the administration know who are the voluntary organizations registered for the event?
- 13. How does the administration estimate the crowd?
- 14. Is the administration prepared for adverse weather conditions?
- 15. What are the arrangements made for visitors? What all things are included in these arrangements?
- 16. How many departments are involved in the planning and what are the responsibilities assigned to them?
- 17. Is there any coordination with the temple administration? If yes, what kind of coordination takes place?
- 18. Are there any special preparations for law and order before and during the event? If yes, what are special provisions?
- 19. Can you elaborate on the participating volunteer organizations in the event? What kind of preparations take place involving them?
- 20. What IEC-related initiatives do you carry out before and during the event?

References:

Solapur, S.S.D.T. (2023). Shri Siddheshwar Devasthan, Solapur. Retrieved from https://shrisiddheshwar.org/

Government of India (2023). Gadda Jatra - Siddheshwar Temple, Solapur. Retrieved from https://utsav.gov.in/view-event/gadda-jatra-siddheswar-temple-solapur-1

Government of India, NDMA (2024). Incident Response System. Retrieved from https://ndma.gov.in/Capacity_Building/Ops_Comm/IRS

NDMA. (2014). Managing Crowd at Events and Venues of Mass Gathering- A Guide for State Governments, Local Authorities, Administrators and Organizers. Retrieved from https://ndma.gov.in/sites/default/files/PDF/Reports/managingcrowdsguide.pdf

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