



UTTAR PRADESH STATE DISASTER MANAGEMENT AUTHORITY



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Hon'ble Chief Minister of Uttar Pradesh

**Guidelines for Managing Crowd at
Events of Mass Gathering
2023**



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FOREWORD

It gives me immense pleasure to introduce the all important and much awaited document “**Guidelines for Managing Crowd at Events of Mass Gathering**” in the State of Uttar Pradesh. Keeping in mind the State’s religious sensitivity, it has always been in the forefront of my agenda to evolve a comprehensive guideline on the subject for districts to carry out their Crowd Management planning. Effort has been made to make the document as comprehensive as possible, however, as the old saying goes that “The proof of the pudding is in the eating”, its exact value can only be derived if districts/local authorities/event organisers could evolve an executable plan of action on Crowd Management. It’s equally important for the district administrations to ensure that Crowd Management Plan does exist for every possible institution, be it cinema halls, transportation hubs, stadiums etc. besides, the large religious/political gatherings.

These guidelines have been carefully designed keeping in view the specific needs of the State. Various past events, both within the State and Country, have been studied and researched in great details and lessons derived have been incorporated in the document. Great emphasis has been given to the use of Science and Technology as a force multiplier. District Authorities may take special note of Remote Sensing which can act as great facilitator in decision making. IRS methodology, which can be very effective with defined roles and responsibilities of various stakeholders, has been very innovatively superimposed on various Crowd Control measures. However, same needs to be carefully subsumed in the overall crowd control measures depending on local dynamics.

I’m sanguine these guidelines will act as valuable resource input for all concerned in formulating their respective Crowd Management Plan. By equipping ourselves with necessary prowess and constantly upgrading it, we can seamlessly remedy any developing untoward scenario in various crowd gathering events and march towards the stated **Vision of Hon’ble Chief Minister of zero avoidable casualty.**

Jai Hind.....

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(Lt Gen Ravindra Pratap Sahi)

Acknowledgement

Crowd Management has lately assumed a significant dimension in the overall ambit of disaster management, which got further compounded with the State peculiarities with respect to religious sentiments. Immense efforts have been put into studying and researching the subject with special attention to the past incidents and lessons derived. The guideline on the subject “Managing Crowd at Events and Venues of Mass Gathering” issued by NDMA in 2014 has been the framework and driving document while evolving the State Guideline. I sincerely express my gratitude to NDMA for formulation and issue of the invaluable guide.

It would be in perspective to place on record the contribution of Senior Consultant, Brigadier PK Singh, VSM, who has evolved the “Guidelines for Managing Crowd at Events of Mass Gathering” with the dynamics as it prevails in the State of Uttar Pradesh. The task involved was to examine myriad of events of public congregations, understanding the nuances of each with behavioral attributes, carrying study and research of past events juxtaposing the Incident Response System in Crowd Control Measures, are few significant ones amongst many. Needless to say, all have been the demonstration of his professional acumen and commitment. The data entry operator, Shri Sunil Kumar has provided unstinted technical support in fructification of this all-important document.

Special compliments to Col VN Supanekar for his valuable inputs and review of the document providing newer and relevant dimensions.

I also acknowledge the contribution made by all those who provided valuable inputs in terms of feedback and suggestions.



(Lt Gen Ravindra Pratap Sahi)

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GUIDELINES FOR MANAGING CROWD AT EVENTS OF MASS GATHERING

“by failing to prepare, you are preparing to fail”- Benjamin Franklin

The above old adage by one of the founding fathers of USA can be aptly applied in the context of crowd management in India. We, in the State, are no strangers to large gatherings and very frequently encounter and tested for managing large crowds, be it political rallies, religious congregations, rush of commuters at Railway/Bus Stations, sporting events etc. It's, therefore, incumbent on the Govt Machinery, at all levels, to evolve an executable plan of action for Crowd Management.

The Guidelines for Crowd Management at Events of Mass Gathering is an effort directed towards fulfilling the vision of Hon'ble Chief Minister as enunciated below. The State being subjected to frequent large gatherings, these guidelines will be an effective instrument for preparation of Crowd Management Plan at districts and below, thereby, building capacity to handle any contingency of disorder.

“To build a safe and disaster resilient State within the framework of National Policy on DM, by developing a holistic, proactive, multi-disaster oriented and technology-driven strategy and policy revolving around a culture of prevention, mitigation, preparedness and response”

INTRODUCTION

Crowd Management at Events of Mass Gathering can be defined as a process of planning and execution to ensure smooth and orderly flow of people in any gathering, be it religious, political, sporting event, social gathering or commuters at transportation hub at railway or bus stations. India and the State of Uttar Pradesh witness large gatherings of different religious denominations attracting millions of devotees with their strong emotions which need careful and detailed planning and execution.

The statistics on incidents of stampede in India would suggest that 79% such incidents happen at places of religious gatherings and, therefore, call for need of Crowd Management. These guidelines, though, can be applied to all kind of gatherings with due modifications, but more essentially focusses on religious gatherings.

“Crowd to Mob”. Individuals behave differently in crowd than when they are alone. When a crowd transits ahead of the threshold of orderliness, becomes emotionally intense and commits violence or on the verge of committing violence, is termed as mob. This concept of “crowd to mob” needs to be

understood by planners at all levels and all trigger elements for same be analyzed at great length and plans evolved accordingly.

It's of significance to understand the crowd dynamics to manage it better. The studies of All India Disaster Management Institute (AIDMI) found that crowds can be self-managing by orienting and re-orienting themselves, stimulating for orderly behavior and preventing injuries. This particular attribute needs thorough consideration by the planners of event. **"Crowd is an asset"** and all efforts must be made to mainstream into the planning process.

There are good as well as bad examples before us to draw out lessons and execute them to avoid casualties. The Prayagraj Ardh Kumbh Mela of 2019, ran for almost two months with record 25 Cr people having visited, is an apt example of success case study, not only in India but across the globe. However, we also have an example of Allahabad Railway Station stampede of 2013 which claimed 36 lives, possibly due to leaving this aspect of management as unattended area while planning the rush of 30 million Kumbh devotees.

Types and Characteristics of Various Mass Gathering

Political Gathering These are rallies for a political cause, show of strength or for the purpose of garnering vote bank. The crowd is highly expressive, impulsive and excited in nature and individual members are attached to the crowd for their political affiliations. Transitory in nature and show their emotional affiliation openly. Strongly bound by their political emotions.

Religious Gathering The religious gatherings carry very strong religious sentiments. Though, the members remain part of crowd and do chanting, religious slogans etc. but not aggressive. Religious crowds are by and large organized unless subjected to organizational failure. They carry common religious beliefs.

Sporting Events Such gatherings by and large carry strong emotional attachment with their teams. There could be different factions of crowd supporting their teams and, therefore, potential for conflict among warring factions.

Crowd at Transportation Hubs

Railway Station The crowd is essentially commuters who do not affiliate with the crowd but carry the potential of turning into organized and expressive crowd once flow is disrupted.

Bus Stops Behaves similar way as above.

Cinema Halls They assemble for the purpose of entertainment, however, can become unruly with disruptions.

HISTORICAL PERSPECTIVE OF CROWD MANAGEMENT

It's of utmost importance that past knowledge of crowd management, both positives and negatives, be studied and applied, wherever feasible. In the context of State of Uttar Pradesh, the historical events which would find relevance are attached as an **Annexure 1**.

Summary of Major Contributing Factors

On analysis of the above historical events, following major factors emerge as contributing factors: -

- (a) Non-existence or inadequate crowd management plan by the administration.
- (b) Lack of clarity on roles and responsibility of various stakeholders.
- (c) Failing to consider converging arteries for people arriving from other stations.
- (d) Lack of understanding of crowd dynamics and behaviour.
- (e) Unsafe and below standard structural infrastructure resulting in their collapse.
- (f) Lack of intelligence about presence of unruly elements in crowd.
- (g) Space management especially on narrow passages.
- (h) Lack of consideration for adverse weather conditions while planning the event.
- (i) Inadequate mechanism to control rumour mongering by crowd or elements who may spread by design to cause panic.
- (j) Sloping and slippery ground especially at the restricted entrance of temples and focal points of pilgrimage.
- (k) No lessons derived and corrective measures taken from the past events.
- (l) Unplanned or inadequate safety consideration for installation of stalls in close proximity, more importantly the food stalls which raises the possibility of fire accidents.
- (m) Incorrect assessment of crowd strength.
- (n) Lack of maintenance and repair of generators.
- (o) Unauthorised alteration in buildings for commercial gains blocking emergency exit.
- (p) Ignoring the violations of municipal by-laws by licensing authorities.
- (q) Uncontrolled permit to commercial activities, more importantly the food stalls which carry potential fire hazards.

OBJECTIVE

The objective of these guidelines is to provide direction to the District Administration/local agencies/event managers for preparation of “Crowd Management Action Plan at Events of Mass Gathering” and carry out effective and efficient Crowd Management.

SCOPE

The scope of this document is: -

Study and derive lessons from past historical events.

- (a) Types of mass gatherings and their behavioural dynamics.
- (b) Provide a framework for administrators to plan and manage events better.
- (c) IRS in the Crowd Management.
- (d) Roles and responsibility of various stakeholders including Civil Society Organisations.
- (e) Provide practical guidelines to venue managers and event organizers, so as to manage the crowd and ensure their safety through clearly laid out implementation procedures.
- (f) Role of science and technology in crowd management.
- (g) Role of media in crowd management.
- (h) Capacity building for crowd management.

PRINCIPLES OF CROWD MANAGEMENT

Crowd Management Vs Crowd Control. The defining principle lies in understanding the fine difference between the two fundamental aspects of subject. Crowd Management involves the holistic planning of the event covering all phases, beginning from pre-event to the culmination of event, whereas, the Crowd Control is the actual conduct of the event. Crowd Control involves creating infrastructure and deployment and operationalization of resources based on various contingencies.

Intelligence Set-up. Intelligence acquisition set up is the most important requirement for any event management based on which the entire planning process evolves. This would include the wide spectrum of activities from crowd dynamics/behavior at one end to any possible nefarious designs at the other extreme. All possible agencies, including the local residents, be brought under the umbrella of Intelligence Set-up.

Advance Planning. Planning is very dynamic process which will keep evolving with fresh inputs and new players. Therefore, it should commence well in time, giving adequate time for all stakeholders to go into minutest of details, including

carrying out rehearsals. This will ensure modifications or changes are affected efficiently without compromising with overall objective.

Integrated Approach. There would be large number of agencies involved in crowd management, more so in case of planned events. All departments of Govt and agencies involved, including Armed Forces and CSOs/volunteer organizations be involved from the beginning of planning process.

Command and Control Structure. The success of any plan would depend on clarity of orders and directions. It's imperative that hierarchical structure be well defined and known to all that from where orders are emanating. "All under one umbrella" should be the principle to operate.

Clarity in Roles and Responsibilities. Along with the above, clear roles and responsibility of departments/agencies be also well defined with no ambiguity whatsoever.

Use of Technology. Technology is the force multiplier with exponential gains in dividends. Use of robust communication system with back up or alternate means, drones and UAVs, GIS application for real time information under the umbrella of State EOC are some of the areas where technology could be put to maximize the efforts.

Organizational Flexibility. Organizational flexibility would be hallmark for success of an event. The Incident Response System provides inherent flexibility in execution of plan and, therefore, should form the backbone of planning process.

Unified Command Unified command and control is one way to carry out command in which responding agencies operate under the single point jurisdiction. A Unified Command may also be needed for incidents involving multiple jurisdictions or agencies. In such a scenario, Incident Commanders representing agencies or jurisdictions that share responsibility for the incident, manage the response from a single Incident Command Post (ICP). A Unified Command allows agencies with different legal, geographic, and functional authorities and responsibilities to work together effectively without affecting individual agency authority, responsibility, or accountability. Under a Unified Command, a single, coordinated Incident Action Plan will direct all activities.

APPROACH TO CROWD MANAGEMENT PLANNING

Crowd Management Strategy

Event Analysis. It's important to examine the event in its totality. Following elements would need special planning consideration.

Type of Event The motive of the event needs to be understood for efficient planning. Behavior and sentiments of crowd would differ based on the type of event. The dynamics of political, religious, social, entertainment, sporting events would be different and provides direction for planning the event.

Understand the Event It's important that complexity of the event is well understood by planners. The geographical area including the infrastructure available and also which need to be created, its capacity to accommodate and also scope of further expansion should be studied before embarking on plans.

Centre of Gravity of the Event Every event will have focal points where people converge. It's possible that event has more than one focal point around which the other elements would revolve. For ex, a religious event may have "Darshan" of idol of God or Goddess and then holy dip in river well separated. These focal points need to be identified and then entire planning is done.

Understanding Crowd. It's important to carry out assessment of crowd strength, behavior, likely gender ratio, older population, children and not to overlook the physically and mentally challenged and sick. Need to consider the belief and faith of people which makes them bring many sick and challenged people for such events. Some nefarious elements with malafide intent in the crowd cannot be ruled out. There is a difference in managing and controlling crowd and the planners need to understand this well. Understanding of crowd behavior is important element of crowd management and all involved in policing and supervision should be trained on this aspect. This should be understood that individuals tend to behave differently in crowd.

Crowd Density. The term "Event Crowd Density" is an important tool, intended for use as a rough guide/standard, for planners/organisers of event of mass gathering. It's of import to understand what is the safe crowd density for static as well as moving crowd. The threshold of crowd density beyond which the individuals lose or begin to lose their control and start swaying, needs a clear understanding and strict monitoring. Maximum acceptable and safe crowd density levels should be relayed to all safety staff as part of the pre-set crowd management plan. This will help in identifying and maintain safe crowd levels

throughout the duration of the event. UAV and aerial platforms could be very effective tool to assess the crowd strength and also density.

Contingency and Possible Risk Assessment. No plans can be developed unless the risks and possible threats are realized and documented. Hazard, Vulnerability, Risk and Capacity Assessment is an important ingredient of Crowd Management Plan and should be carried out. This has to be holistic, covering not only focal area of the event but also the various arteries, transportation hubs and other infrastructure leading to the main event area. All possible contingencies need to be thought of and analyzed. There could be possibility of hazards from crowd dynamics, such as crushing due to crowd surge, falling and trampling and also due to some unruly behavior etc. There could also be possibility of risk from venue or event activity, such as collapse of some temporary structure, poorly maintained or unlit areas, improper entry and exit, poor or slushy ground, failure of equipment like collapse of hoardings, fire accidents due to short circuiting etc.

Space Management. Availability of space for various facilities need to be thought of and planned. Most importantly, the main area or the **focal points** and its ability to accommodate devotees at any one given time would have significant bearing on planning of the event. There would be requirement of systematic planning the other **areas of interest**, such as embussing and debussing areas, parking of all kind of transport, traffic arrangements etc. The planners/organizers also need to consider various institutions/establishment which have the potential and can influence the event, such as major arteries from major transportation hubs, railway stations, metro stations, bus stops, airports etc.

Challenges in Crowd Management

The area of interest/focal area remains limited in space vis-à-vis the crowd, thereby compound the complexities involved.

High emotions of crowd, more so in religious and political congregations which restrains the operational scope of forces employed.

Far too many trigger contingencies.

Large area of crowd congregation, thereby a strain on resources which would always be at premium and overstretched.

Large number of agencies involved with different working norms/SOPs/ethos. Integration of divergent operational mechanics would need very careful consideration.

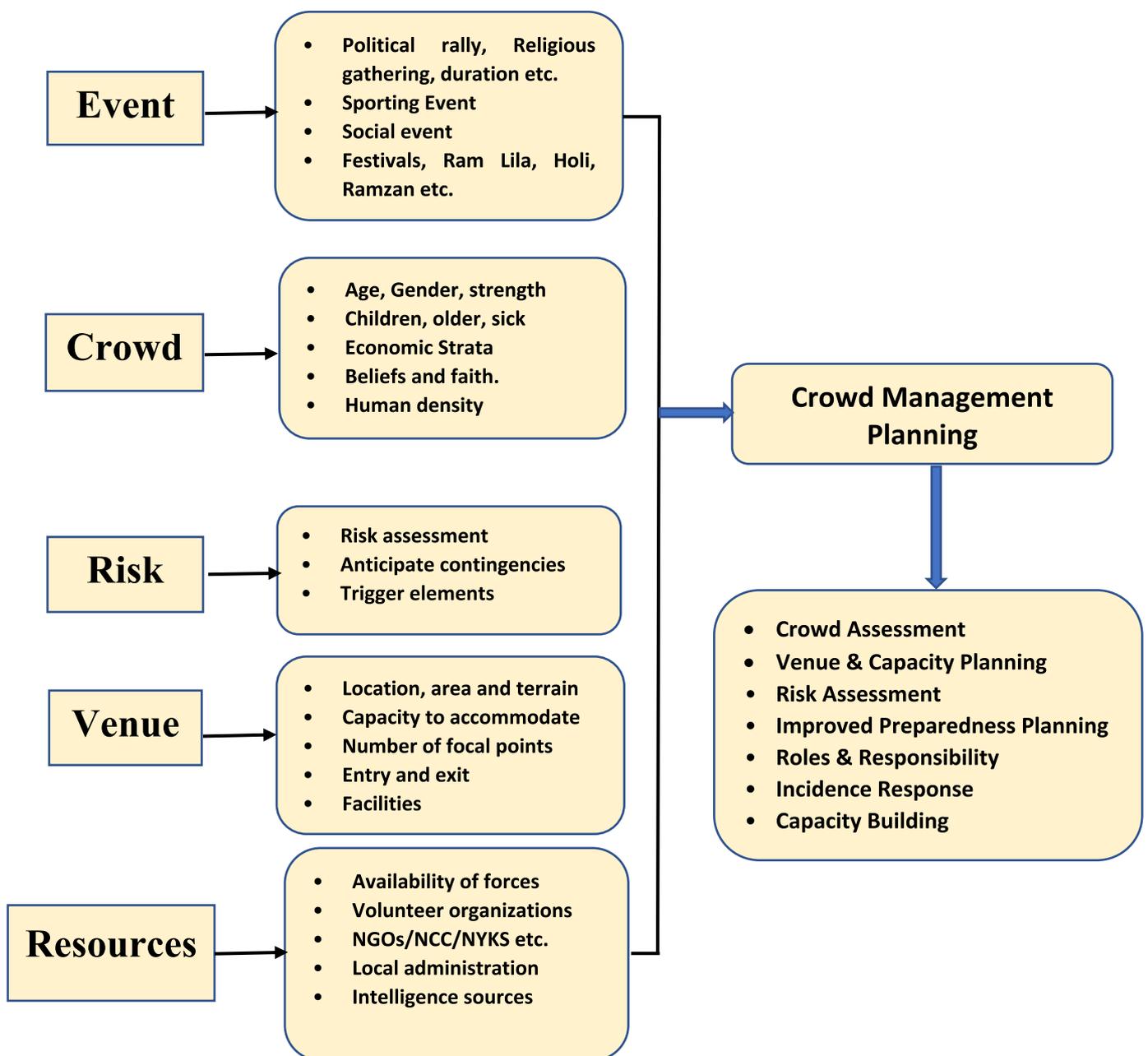
Inter-agency differences require careful handling.

Security of large area would always remain a challenge.

Collection of intelligence including that of presence of miscreants and unruly elements. Terrorist angle cannot be ignored.

Planning and controlling of emergency evacuation.

A suggested sequence of planning activity, as emerges from the strategy, is depicted in diagram below.



Identification of Trigger Points

It's important that various possible contingencies triggering unrest/stampede be thought of and planned accordingly.

(a) **Collapse of hoardings/structures**. Load bearing capacity of barricades and other structures must be scientifically arrived. The siting of such hoardings should be carefully decided so as to ensure no physical contact with people. There could be possibility of structural collapse because of faulty/under specification installation, weather or at times due to sheer crowd weight. These could be hoardings, barricades, shamianas erected for devotees, railings etc.

(b) Threat Assessment and Security

- (i) Incorrect appreciation of security requirement. Security plan should be based of accurate threat assessment encompassing every possible element, including possible terrorist angle.
- (ii) Need for a robust intelligence acquisition machinery involving assets at National level to local level.
- (iii) Inadequate training of police personnel on crowd sentiments and likely behaviour.
- (iv) Inadequate briefing of security personnel on crowd control before deployment.
- (v) Under deployment of security personnel to control crowd.
- (vi) Lack of adequate scientific planning in making police arrangement to deal with crowd with proper sectoral deployment under a senior officer with adequate manpower and total clarity on hierarchy and reporting system.
- (vii) Lack of proper wireless deployment with clutter free call arrangement between sector in-charge and officer in-charge of the police arrangement.
- (viii) Lack of adequate dress rehearsals before actual deployment.
- (ix) Lack of adequate observation towers with PA System and back up force and proper wireless communication to monitor and regulate crowd.
- (x) Lack of adequate CCTV surveillance of the crowd with PA system to control, monitor and guide as and when required.

- (xi) Lack of adequate briefing of the personnel manning the observation towers, CCTV and PA system to deal with problems in effective manner.
- (xii) Inadequate availability of walkie-talkies for the police on duty.
- (xiii) Inadequate anti sabotage checks of the entire area and sanitizing the same against terrorist, extremist and separatist attack.
- (xiv) Lack of separate road opening parties to secure the routes of pilgrimage.
- (xv) Lack of adequate door frame metal detectors and frisking of pilgrims entering the pilgrimage area or persons entering the gathering area.
- (xvi) Fights within groups of the crowd and with police, other officials etc
- (xvii) Ineptitude of the police in effectively managing the crowd and enforcing prohibitory orders.
- (xviii) Security agency firing/teargas/using force leading to panic and stampede.

(c) **Gaps in Institutional Mechanism**

- (i) Ambiguity in hierarchical structure, there should be clarity on roles and responsibility of all stakeholder.
- (ii) Coordination gap between agencies/departments operating in event.
- (iii) Lack of common communication network.
- (iv) Poor and inadequate infrastructural plan.
- (v) Inadequate water, medical assistance, public transport/parking facilities.
- (vi) Lack of understanding of the range of duties entrusted.
- (vii) Communication delays.
- (viii) Vacant/late/delayed posting of key personnel.

(d) **Fire Incidents**

- (i) Cylinder burst.
- (ii) Vendors and food stalls carelessly using K-oil and gas burners.
- (iii) Short circuiting due to illegal connections.

- (iv) Non-availability of fire extinguisher/fire extinguishers not in working condition. Personnel untrained on operating fire extinguishers.
 - (v) Unauthorized fireworks in enclosed places.
 - (vi) Building and fire code violations.
 - (vii) Faulty and unauthorised electric connections
 - (viii) Inappropriate fittings such as MCB, aluminium wires instead of copper wires etc.
 - (ix) Short circuit from electrical generator.
 - (x) Tents and shamianas catching fire.
- (e) **Inadequate Crowd Control Measures**
- (i) Faulty crowd assessment, most importantly the strength.
 - (ii) Failing to take in account the rising faith of people and likely population increase while assessing crowd strength.
 - (iii) Failing to appreciate the peak period of devotees.
 - (iv) People allowed in excess of holding capacity of holding areas.
 - (v) Lack of real time communication between various holding areas resulting in sudden movement of devotees by abrupt release.
 - (vi) Limited holding area with no scope of ballooning and thereby triggering panic.
 - (vii) Closed/locked exit.
 - (viii) Lack of adequate flood lighting of the staging/holding area and the pathways used by the crowd.
 - (ix) Electricity supply failure creating panic and triggering a sudden exodus.
 - (x) Unregulated ferry services, rush leading to overloading of boats, poorly maintained boats.
 - (xi) Not having alternate/emergency routes.
 - (xii) Uncontrolled parking and movement of vehicles.
 - (xiii) Lack of adequate and strong railings to marshal the queue.
 - (xiv) Lack of compartmentalisation in holding areas.
 - (xv) Lack of proper public address system to control crowd.

(f) **Crowd Behaviour**

- (i) Any special treatment to VIP/celebrity should be away from crowd glare, it creates resentment.
- (ii) Crowd behaviour tends to get impatient and irrational with a long wait or hold up in holding areas. Crowd should be kept abreast on public announcement system of expected waiting. In the event of disproportionate wait adequate crowd comfort be ensured in holding areas.
- (iii) A wild rush to force the way towards entrance/exits.
- (iv) Crowds attempting to enter a venue after the start/closing time.
- (v) Need to separate inward and outward movement, collision between large inward flows and outward flows.
- (vi) Rush during distribution of disaster relief supplies.
- (vii) A large number of pilgrims trying to board a ferry.
- (viii) Distribution of food /Prasad /alms /blankets /cash/clothes triggering a surge and crush.
- (ix) Tussle to catching a glimpse/autograph of a celebrity/VIP.
- (x) A large (much more than expected) anxious and competitive crowd gathering because of limited period promotional events.
- (xi) Rush to get covered/free/unnumbered seats at the venue.
- (xii) Crowds trying to re-enter the venue (flows inward/outward flows mixed).
- (xiii) Religious leaders taking a route (in wrong directions) in violation of orders in force.
- (xiv) Last minute change in platform for train arrival/departure resulting in abrupt movements within short time window.
- (xv) Sudden flow of people in reverse direction.
- (xvi) Sudden mass evacuation because of a natural disaster.
- (xvii) Rumours would cause panic and the best way to counter is to keep the crowd aware through public announcement system and live display on TV through CCTV cameras.

(g) **Rumours** can create panic of unprecedented nature and due cognizance of same needs to be taken right at the planning stage. The efficient public address system and deployment of forces for the purpose will play an important role.

(h) **Fare Imbalance** Fare differential in different modes of transportation could also be a possible cause of crowd imbalance. This would essentially manifest at major transportation hubs which should be important consideration for the event planners.

Summary of Trigger Points and its Linkage The possible elements of trigger and its linkage are summarised below: -

- (a) Structural failure (2008 Naina Devi, 2008 Jodhpur Temple and 2010 Pratapgarh incident).
- (b) Lack of understanding of crowd-failure to use them as an asset (No exploited/studied in adequate details).
- (c) Faulty crowd estimation in terms of its strength, behaviour, composition etc (2005 Mandher Devi Temple).
- (d) Understanding of space vis-à-vis crowd (1999 Sabarimala incident).
- (e) Underprepared venue-lack of levelling, slippery/wet areas (2005 Mandher Devi Temple)
- (f) Gaps in institutional arrangement-stakeholders taking lackadaisical heed of their roles (1997 Uphaar Cinema Tragedy Delhi Vidyut Board, violation of municipal by laws resulting in unauthorised construction/alteration, posting/instituting various appointments, licensing authorities going against/overlooked rules.)
- (g) Unhumanitarian policing (1994 Gowari incident baton charge).
- (h) Failure to take cognisance of changing river course (1954 Kumbh Mela)
- (i) VIP culture-diversion of resources for VIP Management (1954 Kumbh Mela).
- (j) Failure to take cognisance of peripheral/outer arteries (1999 Sabarimala, 2013 Prayagraj Railway Station stampede).
- (k) Narrow Approach to the venue (2011 Sabarimala stampede).
- (l) Rumour mongering (2010 Pratapgarh stampede, 2005 Chennai stampede, 2008 Jodhpur Temple stampede).
- (m) Failure to draw lessons from past incidents (2008 Naina Devi stampede).
- (n) Poor space planning vis-à-vis crowd (2005 Mandher Devi, 1999 Sabarimala).
- (o) Inadequate deployment of forces/crowd control measures (2005 Chennai incident)
- (p) Fire incidents (2005 Mandher Devi).
- (q) Lack of coordination amongst various stakeholders (1997 Uphaar Cinema tragedy).

PREPARATION OF PLAN AT DISTRICT LEVEL

It's imperative that each district formulates and rehearses its Crowd Management Plan periodically. The plan should relate to the local dynamics of place and must correspond to the scope of event. For example: managing the crowd in cinema hall in view of fire, stampede or roof/wall collapse would require a different approach than any large-scale political rally or religious congregation.

It's imperative that planners at each level must understand possible scenarios, brainstorm various trigger points for disorder, carry out an assessment of response with available resources, identify gaps and take actions to address them. This is a dynamic process which will keep evolving with continuous improvement, giving a boost to the capacity building.

With a strong religious sentiment, the State of Uttar Pradesh witnesses large congregation of devotees on different occasions. It's functional imperative that such events be thoughtfully planned so as to avoid any untoward incident happening. IRS having been proven and tested methodology of effective response, the same should become framework for evolving crowd management plan at district level. Plans as may be applicable to various establishments of crowd gatherings, viz cinema halls, stadiums, transportation hubs, shopping malls will also be prepared by authorities concerned.

A suggested outline for preparation of Crowd Management Plan is attached at **Annexure 2**

EXECUTION OF PLAN

Approach to Crowd Management

The crowd management measures depend on the serviceability rate at the main focal point of the event. The entire flow of people including entry into staging area and exit from the arena would be dictated by the servicing capacity at the main area. This would also guide the strength which should be accommodated in holding areas for reasonably manageable time. So, the crowd control would essentially entail four elements: servicing rate at the main venue, controlling the inflow, controlling and holding of crowd at staging/holding areas and controlling the outflow.

The organisers of the event should have clear understanding of crowd numbers, arrival pattern and the servicing capacity at the venue. If the demand outnumbers the servicing capacity, there would be overcrowding and disorder, therefore, necessity for input control.

Input Control. Suggested ways of input control are: -

- (a) Mandatory registration process. Preferably at the first arrival point of the visitor, staging area (not to be confused with the staging area of IRS which is meant for response forces for any eventuality).
- (b) Incentive of priority queues with online prior booking/registration.
- (c) No priority for VIPs during peak time.
- (d) Special arrangement for elderly, women with small children, specially challenged including transportation.
- (e) Holding areas with normal comforting needs: seating arrangements, water, refreshment etc.
- (f) Plans for medical first aid needs of crowd be thought of beforehand.

Certain important aspects of crowd control

- (a) Think ahead of crowd motivation and behaviour to address the challenges effectively.
- (b) Crowd control staff should be visible and induce a sense of confidence in visitors.
- (c) Crowd controlling staff at every stage should be aware of activities and progress at stage ahead and behind and be mentally prepared for any changes, like extended holding due to unplanned delay in progress ahead.
- (d) Availability of alternate entrances and exit.
- (e) Robust and reliable communication arrangements among the staff.

Essential of Crowd Management Essential elements of Crowd Management are: -

Staging Area. Staging Area should possibly be the first in series of crowd management elements where visitors report. Registration and all documentation of people are carried out and checked at Staging Area. This facility also serves the purpose of holding area in case crowd has to be detained there for any period of time. It's therefore, imperative that the facility has adequate space and basic comfort needs. CCTV to witness the various activities and public announcement system should be installed.

Holding Areas and Release Points. Depending on the type and strength of crowd, number of holding areas and release points are established which should have all the amenities of crowd comfort.

Medical Aid Post. This is the essential element and must be established to cater for basic medical needs of visitors. There could be need of more MAP depending on the arena and strength of crowd.

Alternate Internal Route/Circuit. This would be very important aspect of planning and never be ignored. It should be ensured that alternate route is always hindrance free for any emergency evacuation.

Provision of Helipad. A helipad is part of emergency evacuation plan and should always be catered for.

A suggested flow chart for devotees is depicted at **Annexure 3**

Information Management and Dissemination

Don't leave the visitors to speculate and make their own judgements. In the absence of necessary information, it's normal human behavior to panic which leads to unexpected flow of people causing disorder. Contrary to the above, timely and appropriate information will add to the orderliness in the crowd. All efforts must be made to ensure that the information required for visitors, is disseminated timely. For this purpose, CCTV be installed at places, such as Staging Area, Reception Centre, Holding Areas etc., Public Announcement System, boards and signage etc. Similarly, it's also equally important that various stakeholders be kept abreast with updated progress of event. Timely information exchange between various stakeholders viz. Govt officials, event managers, CSOs, media personnel, security agencies, local population and volunteer organizations would be crucial for smooth flow of people. Suggested Information Dissemination Methodology is enunciated in succeeding paragraphs.

For Visitors. Following methodology may be followed

- (a) Make use of local electronic media/press for briefing the visitors well before the event as curtain raiser, so as to make people aware of the arrangements.
- (b) Display hoardings, billboards etc. to advertise the event giving details and also what's expected from visitors.
- (c) An advisory giving recommendation as to articles which may be allowed at the venue and what's not.
- (d) Details of public amenities viz. hotels, restaurants, hospitals, transportation hubs, police stations etc.
- (e) Details of timings.
- (f) Route map approach to the venue and also internal circuit of venue.
- (g) Various contact details, such as police, medical, reception, online booking details, ambulance etc.
- (h) Locker facility.
- (i) Weather and climate update.
- (j) Crowd should also be briefed beforehand on dos and don'ts during visit, routes, first-aid facilities, entry and exit including in emergency situation.

For Event Organizers. The organizers should also be provided past data on number of arrivals. With rising population and religious faith, it's advisable that necessary allowances be made to arrive at expected strength of crowd. The arrangements made by the Govt on special transportation arrangements be communicated to the organizers. The event managers need to work in tandem with Govt officials and, most importantly, should be dovetailed with IRS. They need to have total understanding of operational philosophy of IRS.

Security Personnel. Security personnel should have full knowledge of possible threat scenario and trigger points. It's desirable that the entire spectrum of triggers be brainstormed before the event and mock drill carried out. A detailed map of venue with all entry/exit and IRS facilities, intelligence on visitors to include potential problem creators be also shared with them.

Local Residents. Local residents could always be of great value, both during routine as well as emergency, and should be taken onboard during planning stage itself. The locals of area understand the dynamics well and can provide local actionable intelligence. Besides, the locals should be kept informed of temporary closure and diversion of roads, various events including visit by VIPs and also evacuation and response plans.

Signage. Signage/markers should be displayed at appropriate places. It's important that all signage be placed at reasonable distance short of where action is expected so as to provide reaction time to visitors and make them

mentally prepared. Incorrect and unthoughtful placing of signage may add to the chaos.

Safety and Security Guidelines

Following general guidelines should be followed: -

- (a) Watch towers with wireless communication network. A no man's land should be maintained around the tower.
- (b) CCTV monitoring of the entire crowd, sector wise at the main control room and EOC.
- (c) Use of UAV and Drones for real time information and decision making.
- (d) Have communication channels (PA system etc.) to send a message to the crowd.
- (e) All barricading should be prominent and visible to visitors including during night, lest visitors may trample upon resulting in stampede.
- (f) Have alternative routes for releasing excessive crowd pressure.
- (g) Have plans to take care of VIP visitors. Do not hesitate to refuse entry to VIPs, if assessment indicates that it will add to safety concerns.
- (h) Have a separate desk for registration of foreigners.
- (i) Ensure emergency exits are not barricaded, blocked or otherwise inaccessible.
- (j) The shops, if required and possible keeping in view the safety concerns, have to be confined to one side of the road and there should be a space of 3 or 4 metres in between cohorts of 5-6 shops so that one could escape through such space in the event of unexpected rush.
- (k) The visitors should be encouraged to throw food wastes, plastic bottles etc. in clearly identified garbage bins. Ensure adequate numbers of garbage bins across the roads. This will not only help in creating hygienic conditions but will also avoid panic situations arising out of any dog/monkey/elephant menace.
- (l) Helicopter and ropeways service, though eases the rush and creates an alternate route and also an avenue for emergency evacuation, same needs to be carefully planned and operated. If priced exorbitantly, it remains viable only for rich and if lowly priced, will shift

the rush from regular route to helicopter and ropeway services and may create a bottleneck.

Structural Safety. Following are specific fire structural safety guidelines

- (a) Enforce fire safety standards. Special care needs to be taken for maintenance and repair of electrical equipment.
- (b) Ensure that transformers, generator, distribution boxes, circuit breakers are in isolated place away and not accessible to general public. There should be adequate fencing and security around, if required. The electrical appliances should have protection from the weather too, essentially against lightning.
- (c) There should be safe and clearly labelled storage of fuel (e.g. diesel to be used by generators).
- (d) Attempts should be made to minimize tripping hazards (electrical cables, wires) coming in the way of crowd movements and ensure that these are covered or buried underground.
- (e) Ensure that there is sufficient number of fire extinguishers at critical control points and those are of appropriate type (water/foam/powder) for the use.
- (f) Sufficient number of Fire Hydrants and fire tenders and First-aid-Kits for burn injuries should be available at site.
- (g) Sufficient number of water tanks should be created/erected.
- (h) Only authorised vendors should be involved in cooking and catering. Identity cards may be issued. Random checks should be conducted by police and/or event organizers so as to ensure that only genuine licensees are engaged in sales. NGOs should be encouraged to report the irregularities observed.
- (i) Ensure that lifts, stair-ways are well-lit, are in working condition and have unblocked access.
- (j) Ensure that all the structures and electrical wiring/appliances are certified for safety by technically qualified personnel as designated by the Govt or as specified in the orders as to who should certify.

Security Agencies. Suggested functions of security agencies at the venue: -

- (a) Never follow a set pattern of deployment and activities.
- (b) Keep the miscreants and trouble creators guessing.
- (c) Determine intention, motivations of the gathering (political, religious entertainment etc.
- (d) To work closely with event organizers in pre-planning.
- (e) Have regular internal/external communication/briefing with other stakeholders.
- (f) Visit venue to understand the complete dynamics of event arena and crowd.
- (g) Continuously assess and review the situation and required resources in terms of personnel, vehicles, barricades and other equipment.
- (h) Deploy the key personnel well in advance.
- (i) Establish clear rules for use of force. Remember use of minimum necessary force.
- (j) Overall Security and sanitising the venue through anti sabotage check.
- (k) Physical frisking after passing through door frame metal detector.
- (l) Ticket/permit checking periodically.
- (m)Regulating the flows.
- (n) Carry out dry run of the deployment and carry out mock disaster management drill well in advance with due publicity.
- (o) Always have plans for crime and theft prevention at the venue.
- (p) Barricade staffing.
- (q) Police department should solicit cooperation and support from the stakeholders, including CSOs and volunteer organisations, through electronic and print media well in advance.
- (r) Movement of victims/causality to the nearby hospital in case of any untoward incident.

Deployment of Barriers It should be for the purpose to control the flow of people and vehicles. The type and material of the barriers should be in line with the intended purpose, crowd density and force expected. For example,

roadblocks for vehicular movements should be made up of large, heavy objects and should cover the complete width of road including footpath, if any. Care should be taken that the barriers should be strong and safe as people, at time, may lean against them. All the barriers should be visible and area lighted properly in case the gathering is for the night.

Roles and Responsibility of Key Stakeholder

It's important that roles and responsibility of all key stakeholders be unambiguously defined and practiced so that unhindered and timely actions are taken.

Suggested roles and responsibility of key functionaries are given at the **Annexure 4**.

Similarly, the suggested charter of key IRS functionaries is listed in succeeding part of this document under implementation of Incident Response System (IRS).

Implementation of Incident Response System (IRS)

It's important to organize the event based on IRS. The Planning Section entrusted with the overall responsibility of drawing the entire plan of the event with resources available, including bidding for additional forces, wherever required. The Operational Section directs all actions to arrive at the incident objective. The Logistic Section provides all logistic elements for the incident. A separate Finance/Administrative Section can also be set up, if required, making use of the inherent flexibility of IRS.

UP SDMA has come out with Guidelines on Incident Response System (IRS). These guidelines emphasise: -

- (a) Systematic and complete planning process.
- (b) Clear cut chain of command.
- (c) System of accountability for the incident response team members.
- (d) Well thought out pre-designated roles for each member of the Incident Response System.
- (e) Effective resource management.
- (f) System for effectively integrating independent agencies into the planning and command structure without infringing on the independence of the concerned agencies.
- (g) Integration of community resources in the response effort and
- (h) Proper and coordinated communications set up.

A suggested IRS facility for the event management is depicted at **Annexure 5**.

Various elements which function under the IRS and their employability in Crowd Management are discussed in succeeding paragraphs.

Emergency Operation Centre (EOC)

The establishment of an EOC, which in a way is a nerve centre, is mandatory due to likelihood of occurrence of disaster that can take place due to crowding. Though the district EOC may function from its permanent location, it's desirable that an Adhoc EOC, if required and possible, be established with appropriate staff at a suitable location close to the event, however, adequate care needs to be exercised in its siting so as not be too close to the crowd. This will not absolve the District EOC from exercising its responsibility of overall control. The senior most administrative officer of the area concerned shall be in charge of the Adhoc EOC to deal with the incident. He shall be assisted by the senior most officers of police department, medical department, PWD, Fire Service, publicity and others as required.

Certain Guidelines for Functioning of EOC : -

- (a) Be near to the vicinity of the event but safe enough where it is not affected by any type of crowd disorder and can still exercise control over its task under any condition.
- (b) A Grid Map of the entire area under jurisdiction will be prepared to facilitate accuracy in pinpointing the troubled area and activate appropriate response.
- (c) This map will contain all relevant data like position of volunteers/police, ambulances, fire services, medical emergency room, token location etc.
- (d) EOC will remain on communication network with all staff and elements of the event and exercise control over the event through the ICP.
- (e) All emergency support services will be coordinated from this EOC.
- (f) The EOC will constantly monitor the activities in the entire event area and feed real time information to IRT as well as to the ICP, if relevant.
- (g) The centre is also responsible for validating the main routes for crowd movement and alternative routes (marked as standby for ingress and egress).

- (h) The centre, in conjunction with the Planning Section, will plan/regulate the positioning of food stalls, public facilities, watering points, rest areas and display systems.
- (i) Control the IRS facilities.
- (j) Regular weather update with IMD.
- (k) Assess requirements for maintenance of law and order, traffic etc. if any, at the incident site, and decide course of action.
- (l) Establish ICP at a suitable place, in conjunction with Operational Section. There will be one ICP even if the incident is multi-district jurisdictional, with mutual consultation and staff representation from all. Mobile van with complete communication equipment and appropriate personnel may be used as ICP, wherever required.
- (m) Approve the deployment of volunteers and such other personnel and ensure that they are not employed on risky missions, only trained personnel be exposed to risky situations.
- (n) Authorise release of information to the media.
- (p) Review public complaints and recommend suitable grievance redressal measures to the RO (Responsible officer).
- (q) Ensure that the NGOs and other social organizations deployed in the affected sites are working properly and in an equitable manner.

Elements of EOC. Following elements should form integral part of EOC, irrespective of whether it's operational from temporary/adhoc location or permanent. The centre will have the following elements

- (a) **Integrated Communications System.** Positioning of Close Circuit Camera at every grid point (Camera Movement/Direction control vested with communication centre) can give instant to instant information on the situation at ground to the control centre. The grid number of the location must be incorporated into the camera display so as to generate clarity of information regarding location. This makes the system more accurate.
- (b) **GIS Based Application.** Provision should exist in collaboration with NRSC to periodically provide satellite based real time picture of the entire event. The EOC must be staffed with GIS experts to glean out relevant information for action.

- (c) **Public Address System.** The Public Address system must be laid out with speakers at all key points along the route. The cabling must be secure and put through a conduit properly. This is essential to prevent PA system failure en-route. The entire control for usage must be with the EOC. This will also extend up to the location where the ambulances are parked under normal conditions. The Ambulance staff must respond to any call made on the PA system.
- (d) **Announcers.** There should be at least three commentators including ladies, who can make announcements in the local language and in other dialects (based on the demography) to facilitate good clear communication. They should be well versed with the emergency evacuation plans, alternate routes, location of facilities, route map and must have access to the crowd situation at the venue. Over and above, they must be accessible to the public through a public relations officer and a responsible police officer or equivalent to help the public.
- (e) **Display system.** The display system (television) must be positioned at various points giving a variety of information to the people in the crowd like the 'Average service time today is ___', 'it will take '___' minutes for the service', some devotional songs which will reduce the anxiety level of the crowd in line. The display system must be multi-lingual to cater for the varied crowd.
- (f) **Base Station with Repeater (Wireless).** Wireless mode of communication must augment those held by the police forces deployed and must not have frequency clash. Five MHz channel spacing is mandatory between transmitted and received frequencies. There should be at least a three-member team at the emergency control centre to ensure trouble free communication. Initial preparation for installation must involve validation of communication through trial contacts across the route being followed.
- (g) **Medical Emergency Section.** This should not be confused with the Medical Aid Post of IRS Facility. This section has to obtain direct & dedicated hotlines to the hospitals which are already earmarked for meeting the requirement of any disasters. This section will have the phone numbers of all the doctors, hospital wise. There will be at least 10 wireless sets for direct communication with the hospitals in case of communication failure.

IRS: Command Staff. Though the employability of each Command Staff would vary depending on the gravity of event, it's desirable that role and responsibility of each be considered depending on the event and entrusted accordingly. The Command Staff functions under Incident Commander.

Information and Media Officer. IMO plays a very significant role in planning and execution of event. Collect, prepare and disseminate information which may be very useful to Planning Section. Depending upon

the scope of event, a senior officer should be assigned such responsibility and tasking done.

Safety Officer. SO should be thoroughly involved in site safety plan preparations and also participate in IAP meetings. Depending on the magnitude and sensitivity of event, a senior officer should be entrusted with this responsibility.

Liaison Officer. Liaison Officer plays an important role in establishing a link with CSOs and outside agencies such as, Armed Forces, NDRF, SDRF, PAC, Railways, AAI and also representatives of line departments. Inter-agency disputes are also monitored and resolved by the LO and for this reason the appointment of LO requires a very careful consideration. The LO nominated should have adequate seniority and experience.

Administrative Officer IRS is very flexible system and can be modified to suit a particular situation. It's desired a fairly senior officer from the administration (State or District depending on the sensitivity) be positioned at the EOC for overall control. Suggested role and responsibilities of AO are listed below, however, the same will vary depending on situation.

- (a) Maintain a list of concerned line departments like police, PWD, electricity board, medical, private agencies (CBOs, NGOs, etc.) and their representatives at various locations.
- (b) Carry out liaison with all concerned agencies including NDRF and Armed Forces and line departments of Government.
- (c) Monitor progress of operations to identify current or potential inter-agency problems.
- (d) Participate in planning meetings and provide information on response by participating agencies.
- (e) Ask for additional personnel support, if required.
- (f) Keep the IC informed about arrivals of all the Government and Non-Government agencies and their resources.
- (g) Help in organizing briefing sessions of all Governmental and Non-Governmental agencies with the IC.

Incident Response Team

The Incident Response Teams will be nominated to function as per the State Govt Notification No 16/1-11-2019 dated 16 August 2019 and No 183/1-11-2019 dated 16 August 2019. The Operational, Planning and Logistic Sections will function in cohesion to meet the event objective and follow the principle of

“Management by Objective”. The suggested responsibilities of three sections are enumerated in succeeding paras, however, the exact contours will depend on the scope and gravity of event.

Suggested roles and responsibility of various sections are as given below.

(a) **Planning Section**

- (i) Coordinate with the activated section chiefs for planning and preparation of IAP in consultation with IC.
- (ii) Ensure collection, evaluation, and dissemination of information about the incident including weather, environment, availability of resources etc. from concerned departments and other sources. The PS must have a databank of available resources with their locations from where it can be mobilised.
- (iii) Coordinate by assessing the current situation of gathering and predicting probable likely eventualities. Planning Section will have to think ahead of various contingencies and incorporate in the IAP.
- (iv) The major steps for preparing IAP areas are: -
 - (aa) Initial information and assessment of the damage and threat.
 - (ab) Assessment of resources required.
 - (ac) Formation of incident objectives and conducting strategy meetings.
 - (ad) Operations briefing.
 - (ae) Preparation of IAP.
 - (af) Review of the IAP.
 - (ag) Formulation of incident objectives for the next operational period, if required.
- (v) Plan to activate and deactivate IRS organisational positions as appropriate, in consultation with the IC and OSC.
- (vi) Determine the need for any specialised resources for the incident management and bid for same in conjunction with the IC and OSC.
- (vii) Planning Section Chief, in collaboration with the EOC, should utilise IT solutions for pro-active planning, GIS for decision support and modelling capabilities for assessing and estimating the impact and for comprehensive response management plan. For this reason, there is a need for constant interaction between the EOC and PS.
- (viii) Constantly monitor and report to the IC of any significant changes that has taken place or likely to take place in the incident status.

- (ix) Prepare and implement the de-activation and de-mobilisation plan of IRS/resources.
- (x) Prepare and maintain various IRS Forms as and when required.

(b) **Operational Section**

- (i) Appreciate the scope of operation and coordinate with the activated Section Chiefs.
- (ii) Coordinate field operations, in conjunction with the Incident Commander for the accomplishment of the incident objectives.
- (iii) Safety of personnel involved in the operation and the affected people in the crowd be ensured.
- (iv) Deploy, activate, expand and supervise organisational elements in his Section in consultation with IC and in accordance with the IAP.
- (v) Assign appropriate personnel, keeping their capabilities for the task in mind and maintain On Duty Officers list for the day.
- (vi) Ensure resolution of all conflicts, information sharing, coordination and cooperation between the various branches of his section.
- (vii) Suggest expedient changes in the IAP to the IC.

(c) **Logistics Section**

- (i) The Logistic Section will always remain abreast with developments in other sections and coordinate with the activated Section Chiefs.
- (ii) Plan and provide logistic support to all incident response efforts including the establishment of Staging Area, Incident Base, Camp, Medical Aid Post, Helipad etc.
- (iii) It's of utmost importance that Logistic Section remains abreast with other section activities and ensures that adequate logistic requirements including the reserve stock is maintained all time.
- (iv) Participate in the development and implementation of the IAP.
- (v) Keep RO and IC informed on related financial issues.
- (vi) Constantly review the Communication Plan, Medical Plan and Traffic Plan to meet the changing requirements of the situation.
- (vii) Assess the requirement of additional resources and take steps for their procurement in consultation with the RO and IC.
- (viii) Ensure that entire financial planning of the event is done and cost analysis of the total response activities is prepared.

- (ix) Ensure all IRS Forms are prepared and maintained.
- (x) Ensure that the hiring of the requisitioned resources is properly documented and paid by the Finance Branch.

(d) **Staging Area Manager**

- (i) This Staging Area should not be confused with the Staging Area of visitors. This is the IRS facility for the responding forces who would stage for responding to any unforeseen event developing in the arena of event. They would have their vehicles, equipment and other operational necessity.
- (ii) Staging Area should be established with proper layout, maintain it in an orderly condition and ensure that there is no obstruction to the incoming and outgoing vehicles, resources etc. Monitor and control all activities in the SA.
- (iii) Ensure the SA has enough space for all kind of resources including scope for its expansion.
- (iv) Organise storage and despatch of resources received and ensure its despatch forward as per IAP.
- (v) Report all receipts and despatches to OSC and maintain their records.
- (vi) Utilise all perishable supplies expeditiously.
- (vii) Requisition all maintenance and repair equipment at SA, as may be required.
- (viii) Maintain and provide resource status to PS and LS.
- (ix) Demobilise SA in accordance with the Demobilisation Plan.
- (x) Maintain record of various activities performed and IRS Forms prepared and maintained.

(e) **Task Force or Strike Team**

- (i) Review assignments with members of his team.
- (ii) Report on work progress.
- (iii) Coordinate activities with adjacent single resource, Strike Teams and Task Forces, if assigned.
- (iv) Establish and ensure communications.
- (v) perform any other duties assigned.
- (vi) Maintain record of various activities.

(f) **Incident Command Post (ICP)** ICP will also be established close to the event arena with suitable task force to respond to any situation. ICP-in-charge (depending on the nature of operation) should ideally be located to take control of any situation.

(g) **Responsibilities of ICP-in-Charge** are as given below.

- (i) Ensure integrated crowd management plan prepared in conjunction with Planning Section and understood by all.
- (ii) Various contingencies are anticipated and well-rehearsed.
- (iii) Task force earmarked and suitably located.
- (iv) Availability and procurement of resources in conjunction with Logistic Section Chief.
- (v) Communication network established and checked.
- (vi) Determine incident objectives and strategies based on the available information and resources.
- (vii) Ensure that the IAP (Incident Action Plan) is prepared and team members are briefed on performance of various activities as per IAP, ensure same is reviewed every 24 hours and circulated to all concerned
- (viii) Ensure that adequate safety measures for responders and task force in place.
- (ix) Determine incident objectives and strategies based on the available information and resources.
- (x) Establish immediate priorities to ensure constant flow of gathering and foresee any emerging disorder in the crowd.
- (xi) Brief higher authorities, including IRT and EOC about the situation and requirement of additional resources.

Activation of IRS

Keeping in view the nature of event there must be proactive deployment of incident system. The event will dictate nature of the organization of IRS and requirement of resources. For smaller incidents one may not even require the deployment of full organization, however, care must be taken not to amalgamate the tasks of various components but to depute one officer for more than task.

A suggested imposition of IRS on a crowd management event is depicted at **Annexure 6**.

Traffic Management

Traffic Management is the most crucial element of crowd management, including the emergency traffic management. A system approach to plan the flow of traffic is needed right from the external arteries converging to the focal point of crowd gathering. Internal traffic management of the main arena requires special consideration including earmarking of ambulance circuit for quick evacuation of casualties. Consideration of available transport facilities, parking and traffic flow is very important in event site selection, crowd control, and also in emergency evacuation. The guiding principles in transportation and traffic management should be to use public transport as much as possible and minimize the impact of undesirable crowd and traffic.

General traffic management guidelines for police/traffic control staff, visitors, and local residents/NGOs are given below.

- (i) It's equally important that assessment of number of vehicles of all kinds which are likely to arrive is done based on the past data and information collected. Capacity of parking in terms of number of parking areas and numbers which can be accommodated at each will be decided based on this assessment.
- (ii) Traffic plan should be made in close coordination with Staging Area Manager and Incident Commander.
- (iii) Aerial dimension of transportation should not be lost sight of, ensure the same is dovetailed in overall transportation management.
- (iv) Brief the traffic control staff about the event requirements, expected turnout, key event location and timings. Assess the parking space required.
- (v) Erect observation towers with PA system, wireless communication with the traffic police controlling the movement of

vehicles in the parking space and binoculars for identifying vehicle numbers and for observing and regulating the traffic in the parking area.

- (vi) Clearly identify parking spaces for 2/3 wheelers, cars and buses. The public transport system needs to be terminated a reasonable distance away from the venue of interest. This will help in avoiding direct rush into the venue.
- (vii) Vehicular movement must be terminated adequate distance away from main venue of the event. However, special transport arrangements must be made for elderly/handicapped as per needs. For this purpose, the ambulance track may be permitted, if required and no other arrangement is feasible.
- (viii) Diversion/alternate routing is part of traffic plan in emergency.
- (ix) Restrict entry of vehicles (and type) beyond parking lot.
- (x) Regulate and arrange parking of vehicles. Maintain orderliness. The venue of termination of public/private transport system must be large and must have clearly marked ingress and egress route.
- (xi) Visit/check parking spaces regularly before the event.
- (xii) All train and bus schedule must be displayed at parking area and also other prominent places. Ensure that all stakeholders and visitors are aware of the peak times. Similarly, location map of the main event including the route chart be displayed at Railway Station and Bus Station. Frequent announcement of relevant information on public announcement system at Railway/Bus Station be made periodically.
- (xiii) Ensure all CSOs/volunteers/NCC Cadets/APDA MITRAs /NYKS /NSS/Red Cross/CD Organisation mainstreamed in planning the event including traffic management.
- (xiv) Coordinate with railways and bus operators well in advance so that they don't announce too many special trains/buses unilaterally.
- (xv) Calculate the staffing requirement at parking spaces, railway station, bus stands, road intersections and pedestrian crossings.
- (xvi) Prohibiting vehicular traffic on roads around event which will be helpful in avoiding uncontrollable rush of people.

- (xvii) Introduce shuttle bus services between key locations.
- (xviii) Clearly identify and label administrative/emergency routes which would be closed for vehicular and pedestrian movements. Pick appropriate fencing on these routes to prevent possible blocking by unauthorised movements.
- (xix) Ensure that the emergency routes are weather proof.
- (xx) Provide shelters on the routes/ bus stop.
- (xxi) Ban unnecessary shops; remove illegal structures on the roads.
- (xxii) Movement of VIPs, foreign dignitaries, and diplomats should be on a separate route, if available. Consider using administrative/emergency route for short duration, otherwise.
- (xxiii) Ensure that the routes are well lit.
- (xxiv) Construct barricades and diversions to streamline flows or block movements at appropriate place and time as deemed fit.
- (xxv) Consider constructing temporary waiting halls en-route the venue. Ticketing, numbering and registration system can be put up at these gateways to limit the number of visitors or regulate their movements.
- (xxvi) Entire route be sign posted in Hindi, English and also vernacular language.
- (xxvii) Rehearse and introduce traffic control plan a few days before the event so that the locals can get used to it.

Emergency Transportation Plan

- (i) Ensure emergency/contingency traffic management plan is in place well before the event.
- (ii) Helipad area should be planned, marked, secured and rehearsed. This would be most important link in emergency casualty evacuation.
- (iii) Create a contingency/emergency plan to allow quick deployment of buses, ambulances, vans etc.
- (iv) Identify the appropriate locations for standby ambulances.

- (v) Clearly define emergency routes from the venue to the hospitals nearby.

Pontoon Bridges The religious events in the State are, by and large, on river banks, be it Prayagraj, Ayodhya, Mathura where devotees take holy dip in rivers. It's desirable that floating pontoon bridges be launched, may be more in numbers, which will not only ease out the traffic bottlenecks but could also be used in the eventuality of emergency evacuation.

Contingency Planning.

Contingency planning caters for possible eventualities so that individuals and institutions are not found wanting when confronted with a situation. One need not be confused with crisis management; indeed, the two terms are complementary. Contingency planning is the process of preparing for potential emergencies, while crisis management is the overall management of emergencies when they do occur. So, it's incumbent upon the district authorities to incorporate smart and diligent contingency planning, catering for all possible scenarios, so as to be ready when disaster strikes.

Contingency planning would also correspond to the risk analysis wherein various possible trigger points are brainstormed and plans evolved to cater for each. Authorities are also expected to play devil's advocate to brainstorm various unthinkable scenarios to come out with a holistic plan. There could be a scenario for a patient to be air lifted due to road blocks, necessitating provision of helipad and helipad. One may also encounter when situation demands additional force, thereby, need for catering of reserve/reinforcements. Similarly, contingencies, such as boat overturned or bridge collapse need careful consideration.

Media in Crowd Management

Code of Conduct. Media is a very important instrument and can be employed very effectively during all phases of crowd management. The organisers should take media onboard right from the planning stage. Given the important role of media in crowd management at places of mass gathering, it's operational imperative that media acts responsibly. The Press Council of India: Norms of Journalistic Conduct, 2010 lays down the code of conduct for media to be followed. The codes, which are pertinent for the coverage of places of mass gathering, should be proactively provided to media personnel to be reminded of their responsibilities.

Truthful and Objective Reporting. Media must be objective, factual and sensitive. It shall eschew publication of inaccurate, baseless, graceless, misleading or distorted material. Unjustified rumours and surmises should not

be set forth as facts. Media must inform and educate the people, not alarm or scare them.

Wide Publicity through Media. Natural or man-made hazards become disasters through acts of commission and omission of the society. Therefore, the disastrous impact can be minimized by preventive action taken by all the stakeholders including the media. Media should give wide publicity to the do's and don'ts during religious/political or any other type of congregation. Suggested do's and don'ts by key stakeholders are placed at **Annexure 7**.

Media as a Formidable Partner. It is necessary to have complete cooperation between the media and all governmental and non-governmental agencies. The extent of the coordination and cooperation between them determines the nature, the degree and the scale of the preparedness to prevent or meet the challenges of varying magnitude.

Desist Reporting on Incomplete/doubtful Information. The investigative journalist should resist the temptation of quickies or quick gains conjured up from half-baked incomplete, doubtful facts, not fully checked up and verified from authentic sources by the reporter himself.

Role of Science and Technology

People Counting System Installation of People Counting System at holding areas and release points should be implemented which gives digital display of flow of people. This would be quite handy to regulate the flow. Based on the display and progress of flow, crowd flow could be accelerated or decelerated. The system could also be used for decision making in terms of force deployment.

Registration Database It is desirable to have registration of all the visitors. A database system should be deployed to capture demographic details (gender, age, and place etc.) of the visitors. This data would be useful in capturing underlying patterns, if any, which can help in making better arrangements. The mandatory registration of visitors is an extremely important step in "input control" and queue management.

Integrated Computer Systems Computers deployed at the venue must be networked for better integrated management of visitors. Stand-alone mode of computers deprives optimum use of technology. In absence of an integrated information system, it is not possible to ascertain whether visitors with a particular registration slip have arrived at the venue, which could be useful in case of unfortunate catastrophes or for insurance claims. This also prevents the organizers from being able to collect vital statistics like the average time taken by visitors from registration counter to holding area one or two to the main venue. Such a measurement system is needed to monitor and control the crowd movement in an efficient and effective way.

Online registration Online registration of visitors needs to be encouraged, this not only facilitates smooth flow but also assists in advance planning of the event. This registration process could be used to influence the arrival pattern.

Deployment of New Age Identification Tags. The event managers should seriously consider the use of bar-coded bands, RFID tags, or biometric smart cards instead of the traditional paper slips, which get soiled very easily. These tags will carry the basic information of the visitors. As visitors move through the system, the scanners deployed at various locations could be used to keep track of their movements along with timings. This can also help track the exact number of visitors at various locations and can further enable better control of the traffic flow along the route. RFID tags will also be useful for tracking purposes in case of a catastrophe/stampede and in identification for insurance claims, if needed.

Geographical Information Systems Geographical Information Systems (GIS), wherever possible, should be deployed for planning the event, layout, alignment of roads, structural assessment of parking lots, helipads, laying utility lines (water, electricity, gas) etc. It can also be used to determine the hazard location, space management, and determination of evacuation paths. Satellite-based advanced technologies and GPS enabled GIS will play a critical role in years to come.

Closed-Circuit Television Camera Closed-Circuit Television (CCTV) cameras should be deployed for surveillance and early detection of emergency. A central control room, preferably within the EOC for better response, should be setup to observe critical hazard points including entry/exit gates, bottlenecks, narrow stretches, parking lots etc. at the venue. The typical indicators in crowd monitoring are space between people, number of people in hazard area, Crowd build-up in an area, Crowd behavioural changes (viz. pushing, rushing) etc. More advanced cameras have motion-detection and email alert features which are important from crowd management point of view. The EOC should be appropriately staffed by trained personnel. It is also essential to clearly state trigger and action points for various values of crowd density and accelerating movements. A direct communication link should always be available between EOC and security personnel deployed in the vicinity of CCTV cameras.

Aerial Remote Sensing System Utilization of UAV. Light duty UAV should be utilized for monitoring the crowd behaviour.

Capacity Building

In order to build capacity of all stakeholders in managing crowd of myriad dimensions, it's imperative that adequate attention be given in the field of research, education and training. Some suggested activities that can be undertaken are: -

- (i) Mainstream the Universities and academic institutions to undertake study and research work on Crowd Management. The studies so carried should be utilized by state police and administration for further improvement in the Crowd Management technique.
- (ii) Study in crowd behaviour and psychology.
- (iii) Undertake research to determine acceptable crowd density, velocity in various types of terrains, locations.
- (iv) Develop case studies in Crowd Management and control. The participative learning using the case methodology is, typically, more appreciative than the regular lecture-based classes.
- (v) Institute awards to recognise best practices. Conduct workshops, conferences, and competitions etc. for knowledge transfer.
- (vi) Train and employ volunteers, NCC Cadets, NSS, NYKS, APDA Mitra for second line duties.
- (vii) Civil Defence Organiser workers services should be streamlined and synthesized with security & stewarding services.
- (viii) The training curriculum for the basic training of state police for constable, sub inspectors and DYSPs should be revisited to usher in new Crowd Management technique.

Structural and Non-structural Activities The administration/event organizers and other stakeholders need to undertake various structural and non-structural activities contributing to capacity building in crowd management and crowd control.

Mock Drill Mock drills and constant rehearsals of the event with possible triggers be played and response mechanism tested and improved.

Develop Crowd Self Managing Mechanism There is a requirement to sensitise the various stakeholders on the concept of ‘crowd as an asset’ in overall ambit of Crowd Management. The potential of crowd, their capability and its bearing on Crowd Management has to be leveraged.

Crowd Control

- (a) Institutionalise IRS into the Crowd Management mechanism.
- (b) Establish Unity of Command, clarity on Command and Control.
- (c) Each Emergency Support Function to prepare, update and rehearse their deployment/response/recovery plan.

- (d) All line department to prepare and regularly update their plans/SOPs.
- (e) Training of police and other forces on humanitarian approach towards Crowd Management.

LEGAL ASPECTS IN CROWD MANAGEMENT

There are large number of legal provisions to regulate and manage the crowd. The crowd management and role of multiple agencies must be viewed and understood in the background of legal provisions. Duty of police and magistrates in cities and town is to facilitate lawful assembly and protests which is exercised as fundamental right of citizens. If the assembly or procession is in violation of prior information or acknowledged details, such as the strength, route, timings etc. the law enforcing agencies need to act as per the provisions of law.

Certain sample key legal provisions are place at **Annexure 8**.

CONCLUSION

The State of Uttar Pradesh witnesses large number of crowd gathering on account of religious sentiments, social and festival gatherings of varying dimensions, sporting events etc. All these attract millions of crowds may be for short span of time and at times for prolonged period of months. The type, behaviour and sensitivity of the crowd also varies for each type of event. Therefore, the Crowd Management would involve the assessment of crowd beyond the physical attributes in terms of behaviour and psychology. Space and its adequacy to ensure smooth staging, ingress and egress and various activities should be essential element of plan. Needless to say, that such events demand very meticulous planning, supervision and execution to avoid any untoward incident.

Science and technology will be a force multiplier and should be put to optimum use. Remote sensing can act as great facilitator in decision making by providing real time or near real time information of crowd flow or developing congestion and hot spots. CCTV Cameras at critical locations and its feed to the command and control centres would be very useful in responding to a developing situation and also deployment of forces.

IRS methodology can be very effective with defined roles and responsibilities of various stakeholders. However, same needs to be carefully subsumed in the overall crowd control measures.

Annexure 1

HISTORICAL PERSPECTIVE OF CROWD MANAGEMENT

1954 Kumbh Mela Stampede. This was the first Kumbh Mela after Independence, with more than 5 million pilgrims in attendance for the 40-day festival, at Allahabad (now Prayagraj). There are varying reports by different sources on number of deaths ranging from 350 to 800. Major factors contributed to the incident are: -

- (a) Failure of crowd control measures.
- (b) Presence of large number of politicians and VIPs on the day of event leading to diversion of crowd control resources towards VIP management.
- (c) No cognisance was taken by the administration that Ganges River had changed course and moved closer to the embankment, reducing the available space of the temporary Kumbh township, and restricting space for movement of the people. This coupled with the crowd surge resulted in breaking of the barrier and stampede.

1994 Gowari Stampede, Nagpur. Gowari is an Indian cast of cattlemen predominantly living in Maharashtra, Madhya Pradesh and Chhattisgarh. For quite some time, the community had been demanding status of ST to avail themselves of the benefits of Govt jobs and education institutions. This event happened in Nagpur when about 50000 Gowari protestors were trying to reach Vidhan Bhawan to present their demand. To prevent the crowd from reaching the Vidhan Bhawan, police forces were deployed and baton charged resulting in stampede killing 114 and injuring about 500. Major factors contributed to the incident are: -

- (a) Lack of involvement of political leaders and Govt officials to engage in any kind of talks with protesting Gowari community which raised the resentment of protesting crowd.
- (b) Police baton charged the crowd rather than using water sprayers or rubber bullets.
- (c) Most deaths were attributed to asphyxia due to stampeding crowd and not because of baton injuries.

1997 Uphaar Cinema Tragedy

During a matinee show at Uphaar Cinema, Delhi, a transformer installed at the ground floor parking caught fire filling the entire balcony area and staircase leading to balcony with smoke making it impossible for people to exit through.

As a result, 59 people, including women and children, lost their lives and 103 sustained injuries. The Delhi High Court, in its judgement found following lapses.

- (a) Negligence by Delhi Vidyut Board in maintaining and repairing the transformer.
- (b) Unauthorised alterations in the structure by cinema owners for their commercial trade-offs violating municipal by-laws.
- (c) Closing one of the exits and thereby impeding the quick and free exit of people.
- (d) Illegal, unauthorised and haphazard parking in the stilt floor blocking the exit in emergency.
- (e) Licensing authority failed to take cognizance of unauthorised alterations and continued giving temporary permit against the rules.

1999 Sabarimala Stampede. This was a human crowd crush that occurred at Sabarimala temple in Kerala in 1999. On 14 January 1999, 53 people, the majority of them from outside Kerala, died in the crowd crush at the Pamba base camp caused by, among other things, the collapse of the sides of a hillock. Major factors contributed to the incident are: -

- (a) The judicial commission, in its report found the State Government guilty of "negligence in ensuring the safety of the pilgrims coming from different parts of the country".
- (b) It was known that large number of pilgrims arrive from outside the State of Kerala, the administration failed to consider the converging arteries and provide adequate amenities.
- (c) Large crowd on hill top, beyond the holding capacity.
- (d) Uncontrolled crowding on the hill top.

2005 Mandher Devi Temple Stampede. This event occurred in Mandher Devi Temple in Satara District of Maharashtra resulting into death of 291 pilgrims and injuring 250-300. The stampede broke out as 300,000 people converged on the Mandher Devi temple to undertake the annual pilgrimage on the full moon day and for participation in a 24-hour-long festival which also includes ritual animal sacrifices to the Goddess. Gas cylinder explosion and subsequent fire added to the panic. Major factors contributed to the incident are: -

- (a) Incorrect assessment of crowd strength.
- (b) Temple space was small vis-à-vis the crowd.
- (c) The steep step stones at the temple got slippery and wet due to breaking of coconuts by devotees resulting in slipping and trampling of devotees.
- (d) Narrow hill path leading to the temple which was unmanageable to control the large crowd.

- (e) Fire and cylinder explosion in the shop along the path.
- (f) Lack of coordination among various stakeholders.
- (g) Inadequate safety, security, water and medical arrangements.

2005 Chennai Stampede. The incident happened on 18 December 2005 in a school at MGR Nagar in Chennai where relief material was distributed post the severe flooding which left 42 people losing their lives and another 37 injured. Major factors contributed to the incident are: -

- (a) Heavy downpour during the event.
- (b) Rumour that relief material would be distributed to only first thousand people on first come basis, this created a rush to reach first.
- (c) Concrete slope at the entrance on which people slipped and fell with people following trampled over them, creating stampede situation.
- (d) Presence of few policemen against the anticipated crowd.
- (e) Opposing political party workers were alleged to have spread the rumours causing panic situation.

2008 Naina Devi Temple Stampede. This incident occurred on 3 August 2008 in Naina Devi Temple in Himachal Pradesh resulting in death of 146 people and 150 were injured when the panicking crowd were crushed, trampled, or forced over the side of a ravine. Major factors contributed to the incident are: -

- (a) No lessons were drawn and improvements made in crowd management from the similar past event in 1978, killing 65 people.
- (b) Collapse of rain shelter which was construed as landslide by the devotees who tried to get away from the area of landslide, thereby, breaking the barriers erected. This caused stampede like situation.
- (c) Poor maintenance of approach roads to the site which prevented the movement of relief, health and medical needs.

2008 Jodhpur Temple Stampede. A human stampede occurred on 30 September 2008, at the Chamunda Devi Temple in Jodhpur, Rajasthan resulting in death of 224 people and injury to 425 people. About 25,000 pilgrims were visiting the temple to mark the first day of the nine-day-long Navratri. Major factors contributed to the incident are: -

- (a) Rumour about a bomb being planted in the temple caused panic among pilgrims.
- (b) Collapse of a nearby wall may have also created panic.
- (c) The slope at the approach to the temple caused people slipping and falling and following crowd immediately behind trampling over.

2010 Pratapgarh Stampede. This incident occurred on 4 March 2010, at Ram Janki Temple of the Kripalu Maharaj ashram in Kunda, Pratapgarh, Uttar Pradesh. The event killed 63 people and seriously injured 74. Over 10,000

people congregated at the temple to receive free items, such as clothes and food, on the first anniversary of the death of the wife of Kripalu Maharaj. Major factors contributed to the incident are: -

- (a) The gate under construction at the entrance fell and possibly caused panic and stampede.
- (b) Rumour of electrocution amongst the crowd caused the stampede.
- (c) Lack of crowd regulation and control measures.

2011 Sabarimala Stampede. The incident broke out during an annual pilgrimage, killing 106 pilgrims and injuring about 100 more. The pilgrims were returning from a Hindu Shrine on the last day of a yearly festival which attracts millions of devotees. Major factors which contributed to the incident are: -

- (a) The cause of the incident was possibly a broken-down SUV which when moved overturned causing people trampled and rest panicked.
- (b) The above caused the pilgrims run down the hill to reach the road which was already overcrowded.

2013 Prayagraj Footbridge Collapse. The 2013 event was considered a Maha Kumbh Mela, which comes only once every 144 years. It lasted 55 days and was expected to be attended by 100 million pilgrims, making it the largest temporary gathering of people in the world at that time. Stampede broke out after a railing on a footbridge collapsed at the Allahabad railway station. 42 people were killed by the crush of people and at least 45 were injured. Major findings of the incident are as below: -

- (a) Unregulated movement of pilgrims on overbridge which has limited capacity.
- (b) The administration failed to consider the various converging transportation hub for Kumbh Mela and provide necessary assistance and amenities.

Annexure 2

SUGGESTED FRAMEWORK FOR CROWD MANAGEMENT PLAN

(Plans would be tailormade for type of event, for example plans for cinema hall or shopping mall would vastly differ from political rally and religious melas)

Introduction

Brief introduction of district population, geography, demography and religious/cultural beliefs.

Crowd Gathering Scenarios

Examine crowd gathering hot spots with crowd dynamics with respect to purpose, strength, behaviour, gender, children, elder. Space availability and management should also be examined. Examine these with respect to the event, such as theatres, stadiums, cinema halls, festivals like Holi, Diwali, Ramzan etc., religious gathering, such as Kumbh Mela, Chath Puja, Ganga Snan or Political rallies.

Historical Perspective

List out past events with lessons drawn of each.

Vulnerability Assessment

This part of the plan should be made in detail. List out various trigger scenarios, for example there could be a possibility of collapse of a hoarding resulting in stampede. Similarly, there could be fire in cinema hall due to short circuiting in generator, which would dictate what action is needed and who is responsible for that.

Crowd Control Measures

Plan various events and facilities depending on the crowd analysis, such as Staging Area, Holding Areas, Release Points, First Aid/Medical Aid Post etc.

Above need to be planned on the basis of event capacity, for example, if thirty devotees per minute can have darshan, the entire capacity of facilities backwards and flow will have to be made accordingly. The flow diagram attached at Annexure 3 can be taken as broad guideline.

Information Dissemination Management

Information dissemination management for all stakeholders and by what means, using all contemporary technology.

Incident Response System

All IRS facilities and methodology should be superimposed on crowd control measures and responsibilities assigned. The inherent flexibility of IRS should be put to use by making necessary modifications.

Emergency evacuation plan including the aerial evacuation should also be dovetailed in IRS response mechanism.

Roles and Responsibility

All stakeholders need to be identified and their responsibilities assigned. In addition, facilities in-charge, such as Staging Area be nominated and responsibility assigned to avoid any ambiguity.

IRS facilities in-charge, such as EOC, ICP etc. be innovatively nominated and duties laid down.

Chain of Command

Ensure clarity on chain of command and same is well defined in plans.

Safety and Security Arrangements

The plan must include in detail the various safety and security arrangements, like Intelligence set up, CCTV, watch towers, fire safety etc.

Capacity Building

Various elements of Crowd Management and Crowd Control should be included in district capacity building plans.

The district level plans should include various structural and non-structural aspects of capacity building. Training, more importantly behavioural aspect of crowd, would form an essential part of capacity building.

For any capacity building program, districts may approach UP SDMA as routine or prior to any event necessitating efficient crowd management.

Miscellaneous

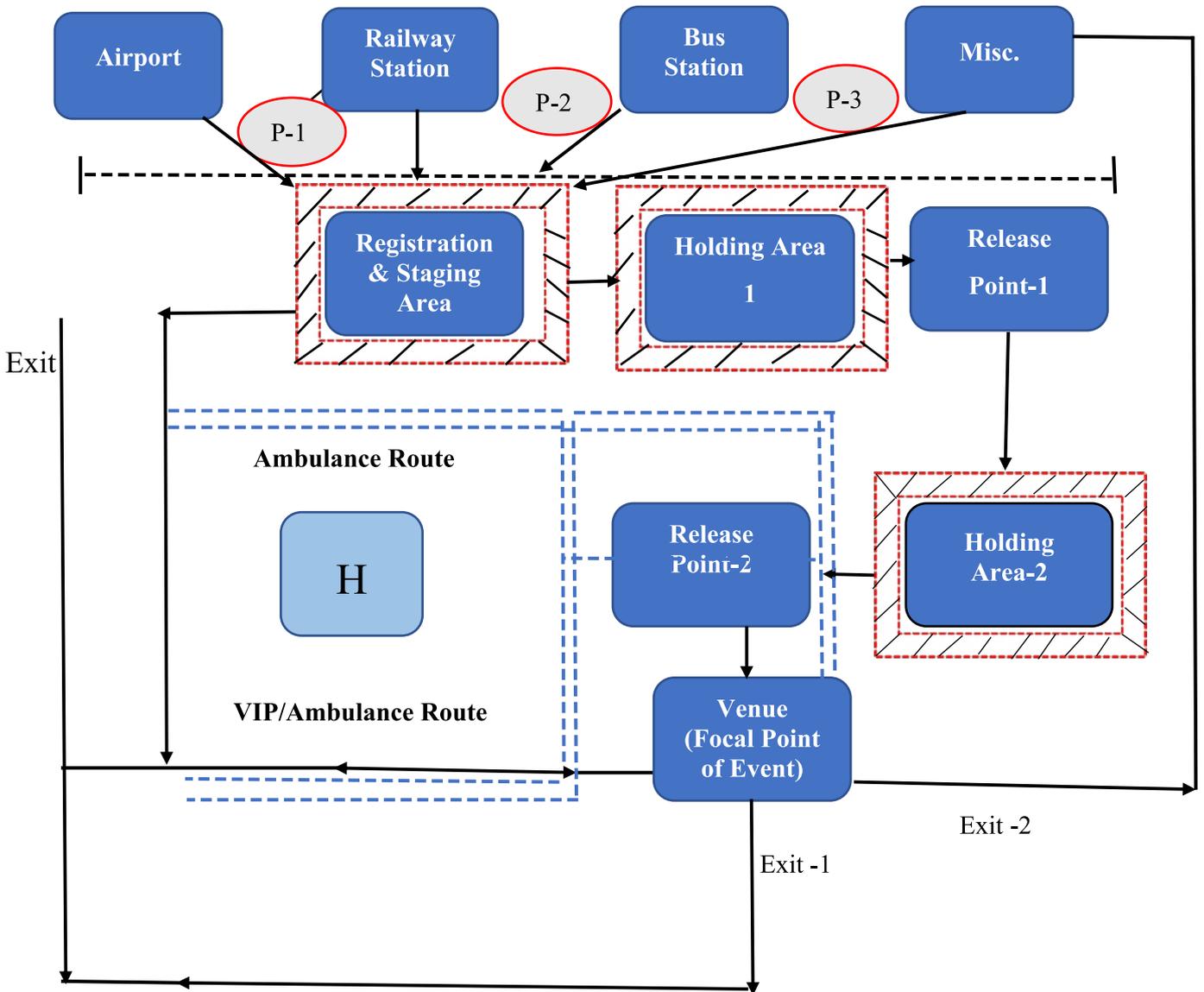
Use of Science and Technology- Remote sensing, GIS application, people counting machine, Satellite communication, RFID tags etc.

Media management.

Legal aspects.

Annexure 3

SUGGESTED FLOW CHART FOR DEVOTEES



- Servicing rate of devotees 30/minute (assumption), based on this, holding capacity of holding areas and various facilities be decided.
- Release of devotees to be regulated as per servicing rate.

- H-Helipad
- P- Parking
- /// Expansion Area
- Ambulance Track
- No Vehicle beyond this Area

(NOT TO SCALE)

Annexure 4

ROLES AND RESPONSIBILITIES OF IMPORTANT STAKE HOLDERS

(Related to Crowd Management)

Visitors

1. Visitors are expected to get acquainted with the venue/event, timings routes, facilities and emergency procedures.
2. Always remain calm, observant and alert.
3. Assist and help needy co-visitors.
4. Cooperate with the organisers and abide by the laws and local regulations in place at the venue.
5. To exert peer pressure on miscreants involved in fighting, pushing, provoking crowds etc. which may lead to heightened safety risks
6. To hold on when there is an obstruction and request the crowd behind to hold on till the obstruction is removed. Once the obstruction is removed don't rush and move normally.
7. If a person slips and falls, person behind or in the front of the person who has fallen should hold on till the fallen person is either lifted or brought to a safe position.
8. To report emerging situation to the staff deployed.
9. To provide feedback and exert pressure on venue/event managers to have continuous improvements in facilities and the arrangements.
10. Volunteer to assist the organisers, whenever asked for or required.

Event Organizers/ Venue Managers

1. To acknowledge and accept the obligation to facilitate visitors in having safe, hassle free, and memorable experience at the venue/event.
2. Never give preferential treatment to anyone based on any criteria except to elders, women with children, specially challenged or sick.
3. Always seek feedback to improve upon. There could always be better idea for crowd management.
4. To develop, implement, review, and revise the crowd management plan by working closely with various stakeholders
5. To comply with the central, state, local laws and regulations.

6. Get all the necessary approvals from local administration, police, fire, PWD and electricity departments etc.
7. To share details of event schedules, venue, transport, medical, food, hygiene, and emergency facilities etc. with the concerned stakeholders

Police

1. To maintain the law and order at events/venues and adjacent areas in close cooperation with local administration, event/venue managers, and the necessary support of the local community.
2. Always remember police force is facilitator for the event and act accordingly. Be friendly to the visitors.
3. To actively participate in venue assessment and preparedness checks.
4. To restrict, guide, and regulate crowd and traffic movements.
5. To prevent the commission of offences and public nuisances by close and regular monitoring at critical hazard points
6. Use of “Minimum Force” only when absolute necessity, should be the motto.
7. To provide a prompt and humanitarian response to any threatening disaster situation in order to prevent escalation of casualty and to save lives.

APDA Mitras/Civil Defence/ NGOs/Volunteers Organisations

1. Closely interact with organisers and Govt agencies and bring out the areas where can contribute in Crowd Management.
2. To inform the local issues to the event/venue Managers, Police, and the Administration.
3. Carry out need assessment of crowd and supplement the organisers/Govt efforts.
4. Constitute various focused group/committees viz. traffic control, people flow control, information, medical assistance, food, water & sanitation, mock drill etc.
5. To help in tracing the missing.
6. Provide first aid in case of emergency.

7. To mobilise local resources (food, shelter, clothing, vehicles, ...) in case of any disorder.
8. To assist in relief distribution and recovery.

DDMA

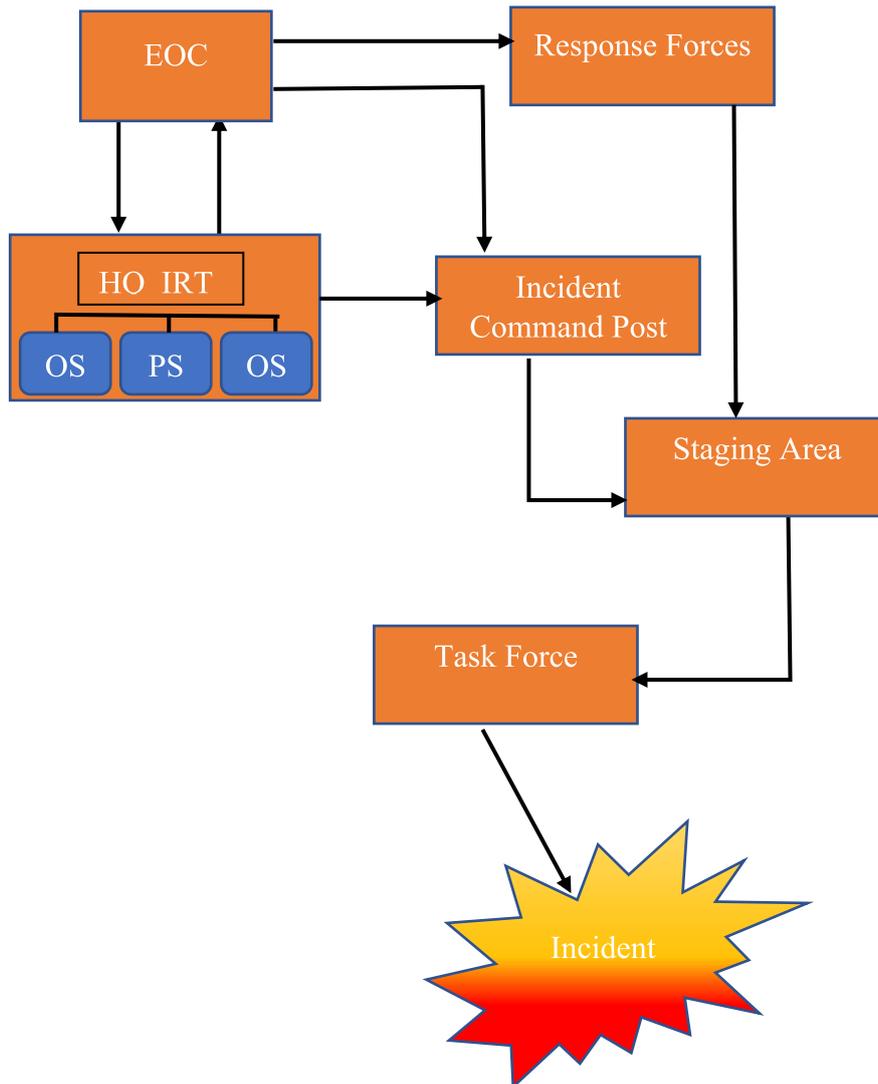
1. Prepare and keep action plan on Crowd Management handy.
2. To follow and implement NDMA/SDMA policies, plans, and guidelines for disaster management.
3. Activate the DEOC and ensure it's fully operational.
4. All IRS elements/facilities are established, staffed and fully functional for any contingency.
5. Ensure communication networks are established and tested for functionality, including alternate means of communication.
6. To help event/venue organizers in providing a safe, hassle free, and memorable experience to the visitors through facilitation and law enforcement.
7. To create awareness about hazards, vulnerabilities and possible preventive actions at places of mass gathering, among government departments, educational institutes, NGOs, local communities.
8. Capacity building of dedicated resource teams to carry out various Crowd Management tasks through facilitation, training, certification, appreciation etc.
9. To develop and implement a coordination mechanism among various stakeholders, especially government departments.
10. To ensure that events are managed through approved plans prepared by the organisers/administrators.
11. Organise regular exercises and drills with the trustees/administrators managing places of worships.
12. Undertake regular "preparedness and mitigation" audit of such places from time to time to identify gaps.

SDMA

1. To lay down guidelines to be followed by State Government Departments/DDMAs for the prevention of crowd disasters at places of mass gatherings.
2. Ensure State/District Emergency Operations Centres are activated and operational during events of mass gathering.
3. SEOC be always ready and alive to any emerging requirement of DEOC including outside reinforcement of forces and also any logistic and administrative requirement.
4. Ensure SEOC is equipped to provide real time images of area of concern in conjunction with NRSC.
5. Ensure SEOC remains in communication with higher and lower echelons.
6. Ensure IRS elements/facilities are in place and fully functional with the staff as per the Govt Notification.
7. Ensure mechanism is in place to receive and dispatch forces or logistics from outside the State.
8. To conceptualise and formulate special programmes and projects as a part of the national initiative to avoid man-made crowd disasters.
9. To provide necessary resource support to district authorities for capacity building.

Annexure 5

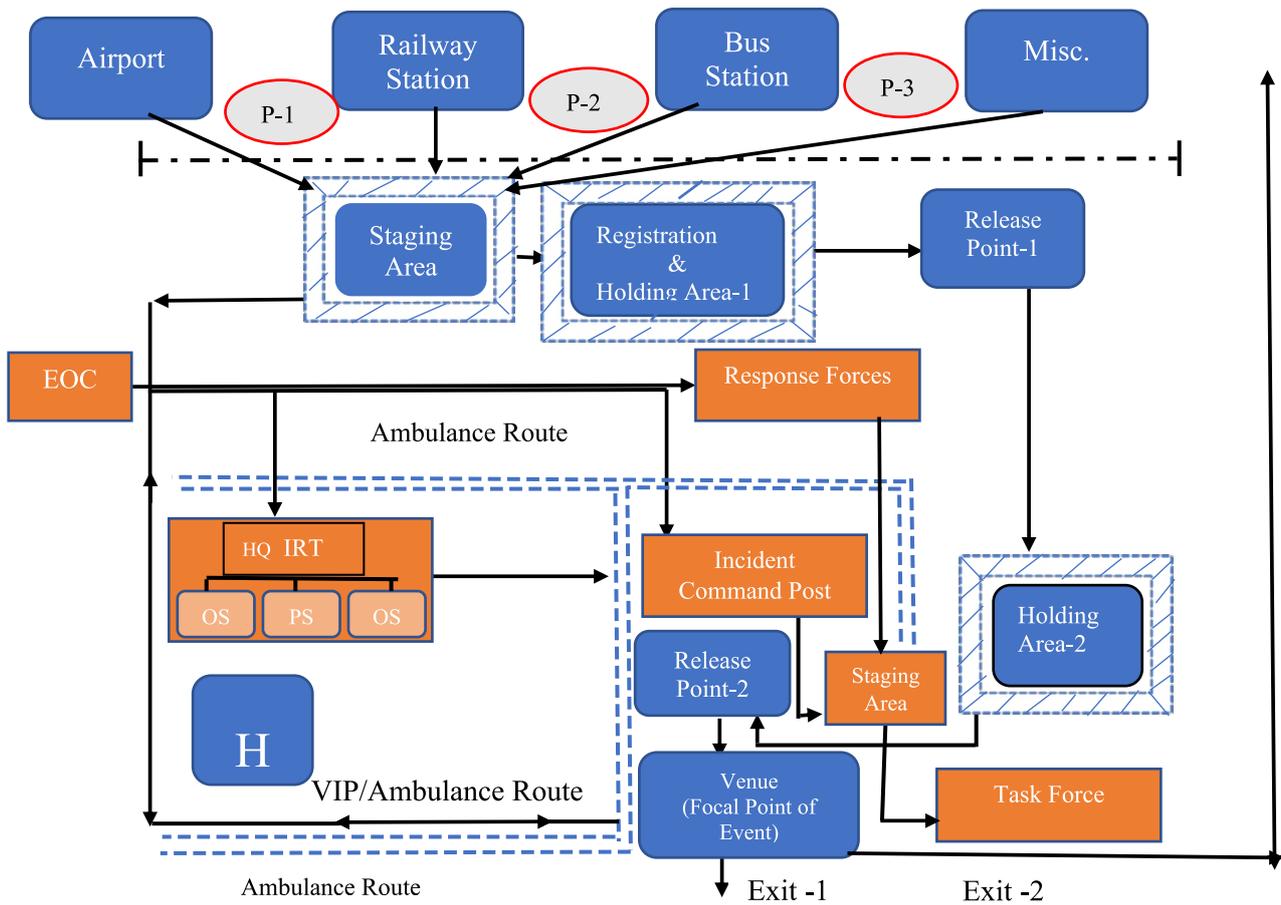
IRS FACILITIES FOR CROWD MANAGEMENT



(NOT TO SCALE)

Annexure 6

IRS SUPERIMPOSED ON CROWD MANAGEMENT



- **Servicing rate of devotees 30/minute (assumption), based on above, holding capacity of holding areas be decided.**
- **Release of devotees to be regulated as per servicing**

H	Helipad
P	Parking
▤▤▤	Expansion Area
⋯⋯⋯	Ambulance Track
┌-·-┐	No Vehicle beyond this Area
■	Crowd Control Measures
■	IRS facilities

(NOT TO SCALE)

Annexure 7

DO's AND DON'Ts FOR VARIOUS STAKEHOLDERS

Visitors

Do's	Don'ts
1. Travel light. Carry medicines, if advised by doctors.	1. Don't carry valuables, unnecessary food and clothing.
2. Register for the event.	2. Don't trust strangers. Don't stay/eat at unauthorised places.
3. Get acquainted with the venue location and layout: entry/exit point, routes, stay/food/medical facilities.	3. Don't rest/sleep on roads, at entry/exit points. Don't litter.
4. Follow rules and regulations. Where there is obstruction in the front don't push through or push back. Hold and alert the others behind to hold till the obstruction is removed.	4. Don't jeopardise your own safety by pushing, fighting, provoking the peers.
5. Note emergency contact numbers.	5. Don't panic and spread rumours

Organizers

Do's	Don'ts
1. Know your visitors.	1. Don't rest on laurels from the past incident-free periods.
2. Own up responsibility and accept obligation to provide safe, hassle free, and memorable experience to visitors.	2. Don't continue with the event if you yourselves are not sure about the venue arrangement.
3. Develop comprehensive crowd management plan. (a) Identify the hazards and their likely impact. (b) Decide whether arrangement are adequate or more needed. (c) Act, Review, and Revise	3. Don't admit visitors beyond the holding and movement route capacities
4. Work closely with various stakeholders. Have regular communication and meetings	4. Don't compromise on safety and security agencies to save money
6. Comply with laws and regulations in place.	6. Don't delay reporting of signs of build-up of an emergency situation

Security Agencies

Do's	Don'ts
1. Assess venue to determine intention motive of the gathering	1. Don't allow the event to happen if crowd management preparedness is found wanting in either of the areas of fire prevention, adherence to structural safety, electricity, hygiene, medical, traffic etc.
2. Help venue/event manager develop crowd management plan	2. Don't ignore the local economic activities around the venue and possible impact of displacement.
3. Have regular internal/external communication with stakeholders	3. Don't forget the power of random inspections and mock drills
4. Develop dedicated resource teams of NGOs and civil defence for various crowd management activities.	4. Don't forget that places of mass gatherings have the potential to act as a showcase for harmonious balance between human activity resource use and minimum environmental impact as opposed to typical resource guzzler and garbage producing place.
5. Run crowd hazard awareness campaigns.	5. Don't discriminate against anyone in rescue and relief.

Media

Do's	Don'ts
1. Do raise alarms if crowd management preparedness is found wanting	1. Don't infringe upon privacy of the victims and their families.
2. Play a constructive role for the smooth crowd movements at the venue/event.	2. Don't sensationalise the incident on the basis of incomplete information for gaining commercial mileage.
3. To give wide publicity to Do's and Don'ts and potential mitigation plans and their likely benefits well in advance.	3. Don't act emotionally Don't provoke and get provoked.
4. Provide timely, factual and unbiased information before/ during/ after a disaster.	4. Don't make value judgements
5. Review rescue, relief, and rehabilitation work by the government machinery	5. Don't interfere and obstruct rescue operations.

Annexure 8

SAMPLE KEY LEGAL PROVISIONS

Disaster Management Act 2005 There are number of provisions in the Disaster Management Act which are applicable for crowd management.

1. Sections 24 and 34 provide powers to control and restrict vehicular and human traffic to/from vulnerable and affected area.
2. Section 33 allows district authority to require any officer or any department at district or local level, if necessary, for disaster management tasks.
3. Section 41 mentions that it is a function of local authority to ensure that all construction projects under its jurisdiction conform to extant standards and specifications.
4. Sections 51, 52, 53 make obstruction in discharge of duties, false claims for obtaining benefits consequent to the disaster, and false warning on disasters punishable offence.
5. Section 58 deems company/individual in charge of the conduct of the business at the time of disaster to be guilty of contravention.
6. Section 65 gives power of requisition of resources, provisions, vehicles etc. for rescue operations.

The Police Act 1861 The crowd management related provisions in this act are as follows:

1. Section 15 allows quartering of additional police in disturbed or dangerous districts.
2. Section 17 allows appointment of residents of neighbourhood as special police officer during the period of disturbances.
3. Section 30, 30A allows the regulation of public assemblies and processions and licensing of the same.
4. Section 31 makes police duty bound to keep order on public roads.

Madras City Police Act 1888 The crowd management related provisions in this act are as follows:

1. Section 34 makes places of public resort to be compulsorily licensed.

2. Section 35 makes eating houses, hotels, wine shops, fencing school, etc. to be compulsorily licensed.
3. Section 41, 41A gives power to regulate assemblies, meetings and processions in public places, etc.
4. Section 61 gives police and fire service to remove obstructing persons/structures in case of a fire.
5. Section 71 has penalty causes for certain offences, like elephant and camel drives/rides, obstructing thoroughfare, organizing assemblies without proper lighting arrangements etc., in public places.
6. Section 74 prescribes penalty for lighting bonfire, burning straw, discharging fire-arm, etc. in or near any public place.
7. Section 76, 76A provide powers to cancel or suspend any license for the breach of conditions of license.

Kerala Police Act 2011 The provisions of Kerala Police Act 2011 related to crowd management are:

1. Section 37 allows entry of police in private places for the purpose of ensuring security or for preventing imminent danger.
2. Section 45 gives special powers for regulation of vehicular, human traffic; suspend arms and explosive licenses in the disturbed area.
3. Section 64 recommends deployment of community policing to give general assistance to the police in the discharge of their duties.
4. Section 67 allows taking over possession of building and premises for preventing riot.
5. Section 68 gives senior most police officer present at the accident or disaster place powers to order as the circumstances may warrant as to the behaviour of all persons.
6. Section 69 allows certain actions, like closure of certain streets etc., on occasion of fire, disaster or accident.
7. Section 76 gives power to temporarily reserve any street or public place by public notice.
8. Section 79 allows district police chief to permit, control or regulate any public assembly for the maintenance of law and order or preservation of public peace or public safety.

9. Section 81 allows notification of Special Security Zone on account of high security threats.

UP Melas Act 1938 The crowd management related provisions in this act are as follows:

1. Section 6 gives district magistrate power to impose toll and fees for any vehicle for animal entering, registration of animals sold within the Mela area.
2. Section 7 gives district magistrate power to prescribe fees for license to play any professions, trade or calling in the Mela area.
3. Section 8 gives officer-in-charge authority to allot sites for market places, bathing places, recreation and entertainment places, officials etc. in the Mela area.
4. Section 9 allows district magistrate to make rules to provide generally against the outbreak or spread of fire.
5. Section 10 allows officer-in-charge to demolish any structure which in his judgement necessary for preventing the fire from spreading.

Cinematograph Act 1952 The crowd management related provisions in this Central act are as follows:

1. Section 10 makes cinematograph exhibitions to be licensed compulsorily and section 11 makes district magistrate the licensing authority.
2. Section 12 states that licensing authority shall not grant license unless adequate precautions have been taken in place for the safety of persons attending exhibitions therein.

Delhi Cinematographs Rules 1953 The rules stipulate number of spectators that can be accommodated in the building. There are mandates and suggestions for seating arrangement, gangways, staircases, exits, parking arrangements, and fire precautions.



Maha kumbh



Moharram



Baisakhi



Mahavir Jayanti



Eid



Ramnavami





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