

SCHOOL DISASTER MANAGEMENT PLAN

Foreword:

The recent Fire accident on 16th July 2004, 93 children were charred to death and 30 severely injured when fire broke out in a private school in Kumbakonam town of Thanjavur district of Tamilnadu State Cause was Fire in the Kitchen and Lack of awareness Impact was Stampede, Shock, Suffocation injury, is a matter of serious concern involved with the administration of schools. On the 23rd December 1996, 425 people died in Dabwali, Haryana due to Fire. 26th January 2001 Kutch Earthquake many school children died. To avoid recurrence of such fire accident and to minimize the effect of Disasters, United Nation Development Programme (UNDP) and other State Nodal Agency is prepared a model Format of School Disaster Management Plan (SDMP), under GoI-UNDP Disaster Risk Management programme.

The SDMP include Risk and Resource mapping, Evacuation Plan, Emergency Contact telephone No's, School Disaster Management Committee, and Detail of Team like Search & Rescue, First Aid, and Evacuation, Shelter etc.and Standard Operating Procedure (SOP) of Teams. All the information is collected in a participatory manner with help of students, staff and other administrative institutions of _____ School.

1. Vital Information About School

~ Name of School:

~ Address of School:

~ Phone Number:

~ Location: Town/Ward/City:

~ Shift – Morning/ Afternoon

~Medium of teaching:

~Number of Medium in School Building:

~No. of Floors:

~Total Class Rooms:

~Number of Class room in each floor:

~Number of Class rooms of each Medium:

~Total Toilet / Bath room (Floor wise):

~ Number of Staircase:

~ Number of Exit/ outlet:

~ Laboratory (Location):

~ Play ground/open space: YES/NO

~ Number of Hall:

~ Number of Teachers:

~Number of Physical Instructor:

~ Number of Non -Teaching Staff:

~ Number of Student:

~ Number of Student in each class:

~Number of Handicapped Student:

~Floor Manager for each Floor:

Class room managers:

2.1 Map of School (Layout Plan) (Building) Map of School with Periphery (Location)

2. 2 Vulnerability & Hazard Assessment:

In consultation with School DM Committee it was found that following are the probable disaster, which may affect the school

List of Disaster:

| Natural Disaster | Man made Disaster |
|------------------|---------------------|
| Earthquake | Bomb blast |
| Tsunami | Flood |
| Volcano | Riots/ Terrorist |
| Storm/cyclone | Epidemic |
| Lightening | Industrial Disaster |
| Thunderstorm | Nuclear Weapon |
| Flood | Gas leakage |
| Draught | Chemical Disaster |
| Land slide | |

Seismic Hazard Analysis and Reduction

- Learning from the past:
- Structural Hazards (School Building / Water tank / Electric Installation / Windows / Basements etc.)
- Class room Hazards (Heavy loose objects / hanging objects / Chemical in laboratories / Aquarium etc.)
- Maintenance Hazards (unskilled maintenance of equipment / articles etc.)

Neighborhood Hazards (Gas stations)/ high-voltage power lines/ major traffic routes (e.g., freeways and railway lines)/ major oil and natural gas pipelines/ transformers and underground utility vaults/ multi-storey buildings vulnerable to collapse/ water towers/ landslide areas. Flooding from collapsed dam or dykes.

1. City Level (Which affect whole city e.g. Flood, Earthquake, etc.)
2. Local Level (which affect at local area – small area for Flood , Land slide, Gas stations etc)
3. School Level (which affect only school e.g. Fire, accident, earthquake)
4. Classroom Level (which affect class room only)
5. Past disasters or affected Hazards

Point on which school can be examined: (Check List)

| Sr No | Check List | YES/NO | Comment |
|-------|--|--------|---------|
| 1 | Are the corridors and stairwells clear of any obstruction | | |
| 2 | Does the school have provision for emergency power back-up | | |
| 3 | Are the fans and lights properly fixed to the ceiling | | |
| 4 | Are there any open electric wire | | |
| 5 | Do the doors of any debrief all classes open outwards | | |
| 6 | Are window and balcony covered | | |
| 7 | Does the school have minimum two exits | | |
| 8 | Are all exits from the school clear | | |
| 9 | Is there adequate arrangement for fire safety | | |
| 10 | Are Fire Extinguisher in working condition | | |
| 11 | Are there adequate amount of Sand Bag | | |
| 12 | Is there Water storage facility available | | |
| 13 | Are there Water Pipe's | | |
| 14 | Are there Water Pump | | |
| 15 | Is adequate water/toilet facility available at each floor? | | |
| 16 | Are staircase functional at all time or some exits are kept locked | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |

3. Assessment of School Building Vulnerability & Preparedness?

A. Architectural Observations:

| Sr. No | Check List | YES/NO | Comment |
|--------|--|--------|---------|
| 1 | Age of the building | | |
| 2 | Does the building have a Building Use Certificate? | | |
| 3 | Construction History (one phase or multiple phase) | | |
| 4 | Soft storey | | |
| 5 | Column Orientation | | |
| 6 | Shape of building | | |
| 7 | Are there cracks in structural elements | | |
| 8 | Are the cracks repairable? | | |
| 9 | Are major repair works carried out for the strengthening or the damaged part of the building | | |
| 10 | | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |

B. Structural Observations:

| Sr No | | Answer |
|-----------|--|--------|
| 1 | Check List | |
| 2 | Space in each class rooms | |
| 2a. | Height | |
| 2b. | Area per person | |
| 3 | Location of the staircase | |
| 3a. | Distance of the staircase from the farthest room | |
| 4 | Staircase details | |
| 4a | Width of the staircase | |
| 4b. | Tread | |
| 4c. | Riser | |
| 4d | No of risers per flight | |
| 4e | Minimum headroom in a passage under landing of a staircase | |
| 4f. | Railing Height | |
| 5 | Passage/Corridor | |
| 5a. | Width of corridor | |
| 5b. | Length of the corridor | |
| 6. | No of exits | |
| 6a | Type of exit (doorway/corridor/passageway) | |
| 6b | Condition of the exit route e.g. obstructions if any | |
| | | |
| | | |
| | | |
| | | |
| | | |

C. Functional/Operational Observations: (Give detail description)

1. Condition of the Electrical panels/mains?
2. Lightning Protection of buildings?
3. Distance of Emergency Service from the school.
4. Special Provisions for physically handicapped

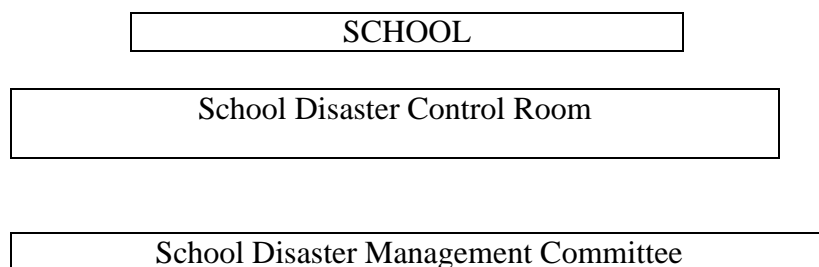
D. External Observation:

| Sr No | Description | YES/NO | Comment |
|-------|---|--------|---------|
| 1 | Any hazardous unit near the vicinity? | | |
| 2 | Means of access | | |
| 3 | Traffic conditions on the road | | |
| 4 | Speed Breakers | | |
| 5 | Caution sign boards | | |
| 6 | Encroachment near the entrance of the building | | |
| 7 | Chances of water logging | | |
| 8 | Drains & open drains | | |
| 9 | Access of fire engine | | |
| 10 | Threat against falling of adjoining buildings/ compound walls/ parapet walls/ chimneys/tall structures/ electricity poles etc | | |
| 11 | Open space | | |
| 12 | All round open space | | |
| 13 | Main entrance to the plot | | |
| 14 | Distance between two blocks <i>or</i> Separation between accessory and main building | | |
| 15 | Footpath width/Pathway | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |

4. School Disaster Management Committee:

| Sr. No | Designation | Name | Office No | Residence No | Mobile |
|--------|-----------------------------------|------|-----------|--------------|--------|
| 1 | School Principal | | | | |
| 2 | Vice Principal | | | | |
| 3 | Scout/Guide Teacher | | | | |
| 4 | Physical Teacher | | | | |
| 5 | Teacher | | | | |
| 6 | Teacher | | | | |
| 7 | Parent-Teacher Association Member | | | | |
| 8 | Male Parent | | | | |
| 9 | Female Parent | | | | |
| 10 | 4 Student | | | | |
| 11 | Security Guard | | | | |
| 12 | NGO | | | | |
| 13 | Local Civil Defense Officer | | | | |
| 14 | Local Home guard Officer | | | | |
| 15 | Local Fire service | | | | |
| | | | | | |
| | | | | | |

4.1 Structure of Disaster Management of School:



A. Response Teams:

| | | | | | |
|--|--------------------------|----------------------------------|-------------------------|-----------------------------|--|
| 1. Warning & Information &Coordination Dissemination Team | 2. Evacuation Team | 3. Search & Rescue Team | 4. First Aid Team | 5. Bus Safety Team | Each teams has to clearly explain the roles and responsibilities |
|--|--------------------------|----------------------------------|-------------------------|-----------------------------|--|

B. Mitigation Teams:

| | |
|------------------------------------|--------------------------|
| 1. Awareness Generation Team | 2. Site Security Team |
|------------------------------------|--------------------------|

5. Response Plan:

Control Room:

Setting up a control room for Disaster related activities.

Room No. ____ at _____ Floor will be set up as School Disaster Control Room.

Points to be consider while making the Plan

- Fix Responsibility
- Action in break time
- Action in class room
- For handicapped or mentally retard student.
- For sick Student
- Arrow in each floor for evacuation
- Duty during evacuation
- Who'll go when and where
- Where to meet in each Disaster
- Roll call after evacuation
- Next Step after Evacuation of First Aid, Search and Rescue, Informing local Authority, Police.
- Coordinating with parents, Ambulance, Fire Brigade,
- Hospitalization of injured people
- Arranging for shelter, Food, etc
- Coordination with NGO's
- Putting copy of each plan on each Floor Notice Board

Response Team:

1. Warning and Information Coordination dissemination Team:

| Sr No | Member | Name | Contact No. |
|-------|--------|------|-------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| | | | |
| | | | |
| | | | |

Before:

- To give the student advance information as to what type of warning will be issued in case of an Disaster
- To install proper warning devices, preferably manual and main two always available responsibility to give warning signals whenever required
- Notice boards and Bulletin boards may be used to give information regarding disaster & there management
- TO FEED CELL PHONES OF MEMEBERS WITH SHORT MESSAGES addressed to key persons who can be help in emergencies such as Municipal Commissioners, Police Chief, Chief Police Officers, Medical Officers & Other officers
- To make parents group for co ordination

During:

- To raise alarm continuously.
- To use public security address system to pass information
- To inform security personnel to open all exit route if not open
- To switch off power supply if required
- To send SOS message to all people concerned
- To coordinate MCGM, Fire Brigade, Police, Ambulance, Hospital, NGO's
- Coordinate with parents

After:

- To check if any persons are still in need of help
- To inform parents of Affected students
- To ask everyone to be alert, if there is possibility of the disaster striking again

2. Evacuation Team:

Members:

All Class Teachers
All Class Monitors

Before:

- To instruct students not to panic if a disaster strikes
- To train them to analyze the situation
- To prepare a team to meet such eventualities with required poise, calm and effectiveness
- To teach them to follow all instruction as far as possible depending on the circumstances
- To give practice mock drill

During:

- To see that students maintain discipline
- To shout instruction loudly
- To act fast if the situation call for that
- Depending on the type of Disaster, to ask the student to stand in places, where there is less danger like corners, underneath tables, away from electric points etc

After:

- To check if anybody is still in need of help of being evacuated
- To take the help of search and rescue tem, if need
- To allow reentry to students after all clear signals is given

3. Search & Rescue Team:

| Sr No | Member | Name | Contact Number |
|-------|--------|------|----------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Before:

- To train members of the team in search and rescue operations
- To prepare a detailed map of the school with different exits, stairs, doors and windows clearly marked.
- To see whether a school bus or any other vehicle can be available in the school during school hours
- To grantee availability of water near the class rooms always
- To arrange water pipes that can be used in emergencies
- To arrange emergency windows in every class
- To arrange loud speakers in all classes
- To arrange for rescue materials

During:

- To duck cover and hold at first sign of earthquake
- To hold on to furniture legs if the furniture moves
- If outside, to move away from the buildings, trees, electric polls
- To start search and rescue operation in case of another disaster

After:

- To check (visually, vocally, physically) every room / class in the building
- To report location of injured to first Aid team
- To report location of other problems to SDMC.
- To look for obvious structural problems
- To report any damages to administrator
- To assign First Aid Team members to accompany Search and Rescue Team during their operations

4. First Aid Team:

| Sr No | Member | Name | Contact Number |
|-------|--------|------|----------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Before:

- To keep a ready stock of medicine and other related supplies properly labeled in the first aid box in a convenient and easily accessible place
- To keep updated the first Aid kit periodically
- To teach student how to give first aid, use bandages and what to do in case of an emergency
- To insist on student to learn swimming, how to deal with electric gadgets and bit of nursing
- To seek the help of doctors and paramedical staff to make an awareness among student about first aid in case of emergency like electric shock, lightning, food poisoning snake bite, inhaling of poisonous gas earthquake etc
- To train the student to give artificial respiration to victims in emergencies
- To disseminate information among student health, hygiene, different ailment and doctors to be consulted

During:

- To arrange for the immediate assembly of team members available and pass instruction quickly.
- Depending on the type of Disaster to give immediate first aid
- To provide drinking water glucose etc as required to the victims
- In case of excessive bleeding to use bandage and send such victim to hospital with the help of other teams
- To avoid giving medicines one is not having enough knowledge about
- Announcements may be made to pacify victims

After:

- To arrange for the immediate hospitalization of the affected people
- To seek the help of local doctor and other authority to deal with the emergency depending on its type and intensity
- To inform parents of affected children about the calamity

Mitigation:**1. Awareness Generation Team:****Members:**

| Sr No | Members | Name | Contact No. |
|-------|---------|------|-------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| | | | |
| | | | |

Before:

- To acquire telephone number of: Doctor, ambulance, Fire, Police, and keep them handy.
- To keep in mind the exit in times of emergency.
- To keep a stock of sand, sources of a water to put out fire caused by petrol and other sources respectively
- To use assembly programmers to educate students about disaster management.
- To utilize bulletins boards as a medium of reaching children
- To make multi media presentation to pass information to students.
- To be aware of the use of fire extinguisher.
- To remain alert always
- To keep tract of the first aid box and contents.
- To keep a flag hoisted for everyone to know wind direction, which may be help in case of fire or gas leakage.

During:

- To understand the nature of Disaster and take quick decision.
- To be self-composed and discipline while evacuate.
- To help others once you are sure of yours safety.

After:

- To make telephone calls to the above-mentioned agencies for help according to the need.
- To make team and help others
- To sympathize and empathize with the victim of the disaster
- To circulate a questionnaire among people to know their view on effectiveness of the disaster management plan

2. Site Security Team:

| Sr No | Member | Name | Contact Number |
|-------|--------|------|----------------|
| | | | |
| | | | |
| | | | |
| | | | |

Before:

- To check electric wiring and appliances, including gas cylinder , fire extinguisher etc
- To arrange for installation of sand bags in enough number at proper places
- To see the proper exit routes are available and functional in the buildings, staircase may be ideal
- To grantee availability of water always

During

- To guide the student to vacant the site through the pre planned route within 2-3 min
- To take care that no stamped or chaos is created during the exit.
- To clear the area of unwanted people and to cordon off the place for better co ordination of rescue and relief efforts

After

- To arrange for the repairing of faulty wiring and appliances
- Reattachment of the fire extinguishers
- Refilling of sand bags
- Checking of the building by structural engineer and furniture etc and there repairs , if any

Preparedness Observations (Revision):

| Sr No | Check List | YES/NO | Comment |
|-------|---|--------|---------|
| 1 | Are awareness programmers organized for the students and the staff | | |
| 2 | Are teachers and students aware of the vulnerability or vulnerable areas in the | | |

| | | | |
|----|--|--|--|
| | school | | |
| 3 | Are mock-drills performed regularly in the schools | | |
| 4 | Safe place/shelters identified in the school | | |
| 5 | Assignment of duties and responsibilities to the staff (S.O.P) | | |
| 6 | Are staff trained for the first-aid | | |
| 7 | Provision for firefighting systems | | |
| 8 | Is public addressed system in working condition? | | |
| 9 | Responsibility to update the plan given? To whom? | | |
| 10 | Is plan copy is shared with each teachers and committee members. | | |
| 11 | Is plan copy display on each floor on notice board | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |

6. Non Structural Measure

~ Capacity Building and Training:
(Principal, Non Teaching Staff, Teachers)

- First Aid
- Fire Fighting
- Search and Rescue
- Crowd Management

~Once in week or fortnight class on Disaster

~Awareness by-

- Do's & Don't
- Poster Competition
- Quiz
- Debate
- Essay writing
- Project
- Photo collection
- Theme day as a Disaster
- Each class room should have chart or poster of Do's & Don't
- Morning prayers- Speech on Disaster

8. Long Term Measures

- Continuous community Awareness Programme
- Mock drill
- Nodal person to update the plan on regular interval
- All activity should be part of system

What School should have

- School DM Plan
- School Committee
- Survival Kit
- First Aid Kit
- Parents Committee
- Emergency Contact Number

Good plans are never finished. They can always be updated based on experience and changing vulnerabilities and assessment of current capabilities.

9. Emergency Contact Numbers:

Help lines:

| Sr No | Department | Helpline | Alternate / Other Number |
|--------------|---------------------------|-----------------|---------------------------------|
| 1 | Disaster Control Room: | 108 | |
| 2 | Police Control Room: | 100 | |
| 3 | Fire brigade Control Room | 101 | |
| 4 | Ambulance: | 102 | |
| 5 | Senior citizen Help line | 103 | |
| 6 | Railway Help line | | |

| | | | |
|-----------|--|------|--|
| 7 | District Disaster Management Control Room | 1070 | |
| 8 | State Disaster Management / Relief & Rehabilitation Department (State Government) | 1077 | |
| 9 | Any other help line | | |
| 10 | | | |
| 11 | | | |

Important Emergency Contact Number:

| Sr No | | Name | Office | Mobile | Residence |
|--------------|---|-------------|---------------|---------------|------------------|
| 1 | Councilor | | | | |
| 2 | School | | | | |
| 3 | Local Police Station | | | | |
| 4 | Local Fire Station | | | | |
| 5 | Local Telecommunication line | | | | |
| 6 | Ambulance Service | | | | |
| 7 | Near by Hospital | | | | |
| 8 | Local Physician | | | | |
| 9 | Local Chemist | | | | |
| 10 | . Alternative Shelter/ Rehabilitation Centre | | | | |
| 11 | N.G.O. | | | | |
| 12 | Food Supplier | | | | |
| 13 | Water Supplier | | | | |
| 14 | Local Social Worker | | | | |
| 15 | Local Civil Defense Office | | | | |
| 16 | Local Homeguard Office | | | | |
| 17 | Local Traffic Control Room: | | | | |
| 18 | Fire Services | | | | |
| 19 | | | | | |

Survival kit

- Adequate water can.
- Long lasting dry food.
- Long rope from last floor till ground floor 10 in number
- Small whisel at least 2 for each floor
- Pocket Radio
- Screw driver, Pakakad, Hammer.
- Separate first aid box.

- Emergency Contact Number
- List of Hazardous things
- Replace things immediately if used.

First Aid box

- Gauze dressing 5 cm and 10 cm square in individual sterile packages.
- Rolls of gauzes bandages 5 and 8 cm in wide (sterile).
- Adhesive bandages.
- Absorbent cotton roll (sterile)
- Adhesive tape.
- Mild antiseptic solution
- Scissors, tweezers safety pins
- Lubricant jelly/ petroleum jelly
- Laundered, ironed and folded sheets of cotton about 1 meter square for making slings and bandages.
- Tongue depressor.
- Airway
- Splints
- Thermometer
- Rubber catheter and tunicate
- Macintosh (rubber sheet)
- Matchbox
- Torch and 4 batteries
- Emergency medicine
- List of medicine for which each student is allergic too
- List of important contact numbers of students with their address
- Contact number of chemist
- Replace things immediately if used.