

# **REPORT ON SCHOOLS SELECTED FOR SEISMIC RETROFITTING IN EACH DISTRICT OF DELHI**

## **Introduction**

As per the seismic zoning map for the country, Delhi lies in the High Risk Zone IV and can be affected by damaging earthquakes. This necessitates enhancement of the state's preparedness to deal with disasters. In order to reduce vulnerabilities of the built environment and of communities to disasters, the Delhi Disaster Management Authority (DDMA) under the Government of Delhi has, over the past few years, undertaken various initiatives towards disaster risk mitigation. These include the USAID supported "*Delhi Earthquake Safety Initiative for Lifeline Buildings*" in collaboration with GeoHazards International (GHI) and Retrofit Circle of the Delhi Public Works Department (PWD), and the "*Disaster Risk Management (DRM) Programme*" in collaboration with the United Nations Development Programme and other bilateral agencies. To bring about the convergence of these two initiatives, the Government of Delhi has initiated the project "*Demonstrative Retrofitting of One School Building in Each District of Delhi,*" which will be carried out jointly by GHI, Delhi PWD, and UNDP. School buildings in Delhi are vulnerable to earthquake damage, which can cause death, injury, structural damage to buildings and contents, loss of functionality, and disruption of school operations. During the project, DDMA, GHI, UNDP and the Retrofit Circle in Delhi PWD will collaborate to produce one earthquake-resistant school as a technology demonstration unit in each of the nine administrative districts of Delhi. At each school, the project team will collaborate with the administration and staff to seismically retrofit buildings, mitigate falling hazards, develop an emergency preparedness plan, and test their preparedness with drills. Mitigation measures will be incremental and coordinated with school authorities to minimise disruptions to school function and costs. These schools will demonstrate earthquake safety measures that can be implemented by other schools in the district.

## **Brief Description of the Project**

A meeting held on 11 Jan 2008, DDMA, Education Department, PWD, UNDP and GHI jointly proposed project of retrofitting a school building in each district of Delhi. The main components of the project were mentioned as:

1. Selection of one school in each district, and the assessment and retrofitting of a building in each school by the retrofit Circle of Delhi PWD and GHI;
2. Awareness generation and school preparedness planning facilitated by UNDP and GHI.

This will include:

- (a) Focused awareness generation campaigns for the staff, students and parents on disaster risk management measures
- (b) Leading the formation of school disaster management teams.
- (c) Conducting specialised training for these teams (training will be led by UNDP in collaboration with the Delhi Fire Service, the Civil Defence etc.).
- (d) Assisting in the preparation of school disaster management plans.
- (e) Conducting preparedness drills in the schools.

3. Falling hazards mitigation demonstration in each school building facilitated by GHI and UNDP.

This will include:

- (a) Training a team from the school in falling hazards identification, and assisting them with a hazard hunt and prioritizing items to fix.
- (b) Fixing hazards from furnishings, equipment, contents, and building systems that could pose a threat during an earthquake, including one demonstration room selected by the school. (Carried out by GeoHazards International in collaboration with the UNDP, and the DPWD Retrofit Circle along with a team from the school including staff and students.)
- (c) Sensitisation programmes on falling hazards mitigation.

4. Training of engineers and construction artisans. During the actual retrofitting, engineers from other agencies of the Delhi Government will be exposed to the methodologies of assessment and retrofitting of buildings. The retrofitted buildings will serve as technology demonstration units. Retrofit Circle, DPWD will carry out the assessment of these buildings in collaboration with GeoHazards International, design the retrofit, and oversee retrofit construction in consultation with school authorities. The project team also proposes to train engineers and artisans from other departments in Delhi during the actual retrofitting of the demonstration units.

### **Selected Schools**

The nine selected schools are shown below. Each school is described in subsequent sections.

<b>No</b>	<b>District</b>	<b>School</b>
1	Central	Sarvodaya Kanya Vidyalaya Girls School, Dariyaganj
2	West	Govt. Boys Sr. Secondary School, Rajouri Garden Extension
3	North	Govt. Sarvodaya Kanya Vidyalaya, Burari
4	East	Govt. Sarvodaya Kanya Vidyalaya Girls School, Rani Garden
5	North- East	Govt. Sarvodaya Vidyalaya , Nand Nagri
6	New Delhi	Sarvodaya Kanya Vidyalaya Girls School, Pandara Road
7	North-West	Sarvodaya Kanya Vidyalaya Girls School, Kanjhawala
8	South-West	Govt. Sarvodaya Bal Vidyalaya, Bijwasan
9	South	Govt. Boys Sr. Secondary School, Pushp Vihar

## **Sarvodaya Kanya Vidyalaya Girls School, Dariyaganj**

The school is located nearly 500 meters from Delhi Gate on Dayanand Marg. This school was established in 1918. The other buildings are fairly new. The school conducts classes in one shift, Morning.

### **Building Users**

The school is headed by Ms. Sushma Datta (Principal). The task force of the principal consists of one male and 24 female teaching staff and a support staff of 6 males and 3 females. The school conducts classes from 1<sup>st</sup> to 12<sup>th</sup> standard and has strength of 804 girls. The school building also houses a nursery run by Municipal Corporation of Delhi.

### **The Buildings**

The school comprises five buildings as follows:

*Building 1:* The main building of pucca construction has a ground and a first storey. It is a T shaped building. There are two staircases – one at the main entrance and the other at the end of the corridor. Whilst the main staircase is a part of the original construction, the other has been recently constructed and is made of iron. There are a total of 24 class rooms and 14 other rooms (library and laboratories etc) in the building.

*Building 2:* Pucca construction houses a Hall

*Building 3:* A fabricated room which functions as a Medical Centre.

*Building 4:* A 4-room pucca construction and is used for indoor games.

*Building 5:* Semi- pucca construction used for primary classes (1<sup>st</sup> to 5<sup>th</sup>).

*The layout of the school:* The distance between the main building and the hall is 3.5 m. The distance between the main building and the game room is 2m and the distance between the main building and the semi-pucca building is 1m.

### **Open Area**

It has a small (10m x 20m) open area surrounded by the school buildings and the boundary wall. This area also has a small stage, used for assembly.

### **Building Condition**

In the first look the buildings condition is good and is regularly maintained by PWD. Building 5 is under renovation and the masons are making the second door for the single door class rooms. The school has two exit doors one of them is permanently closed as it opens to a parking area of the market surrounding the school.



(The permanently looked exit)

### **Falling Hazards**

The school is quite vulnerable to falling hazards the hazards in different rooms of the school are as follows:

- (a) Laboratories: Chemistry, Biology & Physics practical are all held in the same room. The specimen, chemicals and the physics equipment are hence stored together. This makes the laboratory particularly vulnerable to fire /

explosion during earthquakes. The presence of a number of LPG cylinders used for conduct of practical increases the vulnerability of this compartment during disasters. However, the presence of a number of fire extinguishers stowed properly in the room reduces the risk to a certain degree.



(Biology/Chemistry Lab)



(Home Science Lab)

(b) Library: The cupboards in which the library books are stowed have glass doors thereby increasing the hazards.



(c) Corridor: The corridor is 1.5 m wide in the main building while it is approx 0.5 m wide in the kuccha building. The corridors in both the buildings are mostly clutter free but on the first floor in the main building, cupboards and furniture are stowed in the corridor. Due to this, one of the exits is blocked.

(d) Class rooms: The fans and light connections are vulnerable.

(e) Principal's Room: The Principal's Room has a number of cupboards and trophies which are not secured properly.

(f) Staff Room: All the walls of the staff room have cupboards lined up against them.

**Other information:**

The school's principal herself is the nodal disaster management teacher. They have been practising fire drill. The teachers are very well trained and have the fire evacuation plan displayed in the class rooms also. The nursery children though not from the same school are the part of the planning and drill also.

**Sarvodaya Kanya Vidyalaya Girls School / Government Boys Senior  
Secondary School, Rajouri Garden Extension**

The school is located near Najafgarh Road, parallel to the metro line. This school building was built in 1966 as a shopping complex but was converted to a school in 1973. The school has two shifts, Morning (700am to 1230pm) and Afternoon (1300pm to 1830pm).

**Building Users**

The morning shift is headed by Ms. Promila Chadha (Principal). The task force of the principal consists of approximately 100 teaching and non teaching staff. The school runs classes from 1<sup>st</sup> to 12<sup>th</sup> standard and has a strength of 2000 girls.

The afternoon shift is headed by Mr. S. K. Bhardwaj (Vice Principal). The staff consists of 31 male and 1 female teaching staff and 4 male and 2 female non teaching staff. In the afternoon the school runs classes from 6<sup>th</sup> to 12<sup>th</sup> standard and has a strength of approx 900 boys.

**The Buildings**

The school comprises four buildings as follows:

*Building 1:* The main building of pucca construction has four storeys and two basements. There are two staircases on both the sides of the building. The building has 6 rooms on each floor, hence 3 rooms on each side of the main passage. The passage has one big room on each floor used as laboratories for various streams. There are a total of 24 class rooms and 18 other rooms (library and laboratories etc) in the main buildings.



(The building 1 with passage and the two wings)

*Building 2:* These Tin Shed are 8 in number and are spread over the area.

*Building 3:* The third building is a semi- pucca construction and is used for primary.

*Building 4:* The fourth building is a one room Pre-fabricated structure.

*Structure 5:* The school has one swimming pool also.

*The layout of the school:*

All the buildings are at a distance of 4 to 5 m from each other. The distance between the wall of the swimming pool and two tin sheds is less than 1/3 m.

**Open Area**

The school has a play ground (25 x 25 m) but the tin sheds were constructed afterward and make the route from the main building to the playground not very easy to negotiate.

### **Building Condition**

Building 1 has plaster falling at several places and the rusted rods are visible. The walls and the pillars have visible cracks. Stairs are broken at most of the places. At several places in the toilets the ceiling is falling. The basement is flooded most time of the year and is a breeding ground for mosquitoes. Recent maintenance to the building has jammed all the windows of the classes. The toilets don't have proper water supply.

### **Falling Hazards**

The school rooms are vulnerable to falling hazards like:

(a) Laboratories: The school has separate Chemistry, Biology & Physics laboratories. The specimens, chemicals and the physics equipment are hence stored together. This makes the laboratory particularly vulnerable to fire / explosion during earthquakes. The presence of a number of LPG cylinders used for conduct of practical increases the vulnerability of this compartment during disasters. However, the presence of a number of fire extinguishers stowed properly in the room reduces the risk to a certain degree, though the extinguishers are 3 years old and how to use them remains a mystery. The laboratories are spread in the premises. Boys have them in the building 1 and girls have them in tin sheds.



(b) Corridor: The passage on the first floor is used to store the steel cupboards.



(d) Class rooms: The fans and light connections are vulnerable. The windows are broken. The exit to the classrooms in the basement have grill doors and are always half closed. In building 3 steel one steel cupboard per room is a common feature.

(e) Principal's Room: The Principal's Room has a number of cupboards and trophies which are not secured properly. They also have computer.

(f) Staff Room: All the walls of the staff room have cupboards lined up against them.

(g) Toilets: The ceiling has plasters falling at several places and the tiles are also not intact.



(g) External falling Hazard: Water storage tank is not secured.



**Government Sarvodaya Kanya Vidyalaya / Government Sarvodaya Bal  
Vidyalaya, Burari**

The school is located 15 km away from the Deputy Commissioners Office, North Delhi district. This school's main building was established in 1950. The other buildings were constructed later. The school runs in two shifts: Morning (700 to 1230) and Afternoon (1230 to 1830).

**Building Users**

The morning school is headed by Mrs. Sandhya Pahwa (Principal). The task force of the principal consists of 59 teaching staff and a support staff of 10. The school holds classes from 1<sup>st</sup> to 12<sup>th</sup> standard and has a strength of 3075 girls and 79 boys in primary section in the morning shift. The afternoon school is headed by Mr. Udai Singh. The task force of the principal consists of 63 male and 1 female teaching staff and a support (non teaching) staff of 12 males and 4 females. The afternoon shift has 2649 boys in classes from 1<sup>st</sup> to 12<sup>th</sup> standard.

**The Buildings**

The School comprises five buildings as follows:

- Building 1:* The main building of pucca construction is a two storey building. There are two staircases: one at the centre of the building, and the other at the left end of the building .
- Building 2:* A pucca construction with 5 rooms
- Building 3:* Tin shed construction having 9 class rooms.
- Building 4:* A pucca construction used as the hall of the school
- Building 5:* The fifth building is of semi- pucca (ceiling is made up of stone slabs and iron I beams hold them) structure mostly used for the primary section.

*The layout of the school:*

The distance between the main building and second pucca construction varies from 2m to 5m at different locations.



(Building 1 and 2)

The space between the main building and the tin shed is more than 15 m. The space between the main building and the hall is more than 7 m.

### **Open Area**

A big play ground (50m x 30m) is on the left side of the main building.

### **Building Condition:**

In the first glance the building looks in good condition

### **Falling Hazards**

The school building is vulnerable to several falling hazards in different rooms of the building:

(a) Laboratories: Chemistry, Biology & Physics labs are in separate rooms and are different for both the schools. The specimen, chemicals and the physics equipment are stored in open on the top of the table. There are charts and other training aids all over the room. Maths, home science, social studies, geography and CAL (only for the boys school) laboratory have equipments kept everywhere. All of them also have 2-3 steel cupboards.



(Chemistry Lab)



(Physics Lab)

(b) Library: There are two libraries in the whole school and the cupboards in which the library books are stowed have glass doors thereby increasing the hazards, moreover the books are also stacked on these cupboards.



(c) Corridor : The corridors are used as a storage area for the steel cupboards and one can see them every where in the main building.



(d) Class rooms: The fans and light connections are vulnerable.

(e) Principal's Room: The Principal's Room has a number of cupboards and trophies which are not secured properly. It also has a television and computer.



(f) Staff Room: All the walls of the staff room have cupboards lined up against them.

**Other information:**

The girl school conducts mock drills on a regular basis, though they have not done the same as the alarm bell is not in a working condition. They have 14 fire extinguishers some of them are empty. Awareness programme was held in the last year. This school has 15 visually challenged teachers in afternoon and 4 in the morning.

**Government Sarvodaya Kanya Vidyalaya Girls School /  
Government Sarvodaya Bal Vidyalaya, Rani Garden**

The school is located nearly 500 meters from Deputy Commissioners Office in East district, Delhi. This schools main building was established in 1978. The other buildings were constructed later. The school runs in two shifts: Morning (700am to 1200pm) and Afternoon (1250am to 1820pm).

**Building Users**

The morning school is headed by Mrs. Manorama Bhatnagar (Principal). The task force of the principal consists of 3 male & 34 female teaching staff and 4 non teaching staff. The school conducts classes from 6<sup>th</sup> to 12<sup>th</sup> standard in the morning shift and has a strength of 920 girls.

The afternoon school is headed by Mr. B. S. Sharma. The task force of the principal consists of 42 teaching staff and 8 non teaching staff. The school conducts classes from 1<sup>st</sup> to 12<sup>th</sup> in the afternoon shift for 1038 boys and 138 girls in the primary section.

**The Buildings**

The school comprises four buildings as follows:

*Building 1:* The main building of pucca construction is a two storey building with an open courtyard. On either side of the courtyard are the stairs. There are four exits.

*Building 2:* The second building is of semi-pucca construction with 10 class rooms for instructional purpose and 20 for other.

*Building 3:* The third building is a tin shed.

*Building 4:* The fourth building is porta cabin

*The layout of the school:*

The main building 50 m away from the main entrance of the school.

The main building and the tin shed and the semi-pucca buildings are more than 5 m apart, whereas the tin shed and semi pucca are 3 m away from each other.

**Open Area**

There is a small open area in front of the school.

**Building Condition:**

It is a two storey building. The main building has the office of District Education Officer. The ground floor and the first floor are occupied by them and hence the stairs are blocked and can not be used by the students. All the students have only one stair to commute.

**Falling Hazards**

The school rooms are vulnerable to falling hazards such as:

(a) Laboratories: Chemistry, Biology & Physics lab are in separate rooms. The specimens, chemicals and the physics equipment are stored in open on the table top. This makes the laboratory particularly vulnerable to fire / explosion during earthquakes. The morning and afternoon shifts have separate laboratories. Maths, home science, social studies, geography and CAL laboratory have equipments kept everywhere. All of them also have 2-3 steel cupboards.



(Chemistry Lab)

(b) Library: There are two libraries in the whole school and the cupboards in which the library books are stowed have glass doors thereby increasing the hazards.



(d) Corridor : The corridors are used as a storage area for the steel cupboards and they are sometimes used for conducting classes.



(e) Class rooms: The fans and light connections are vulnerable.

(f) Principal's Room: The Principal's Room has a number of cupboards and trophies which are not secured properly. They also have a huge wooden display board hanging on the wall behind their chair.

(g) Staff Room: All the walls of the staff room have cupboards lined up against them.

**Other information:**

The school has a nodal disaster management teacher. Teachers have sensitised the students.



They have a fire evacuation plan. This school is located on the bank of river Yamuna and during rains some rooms get flooded.

## **Government Sarvodaya Kanya Vidyalaya, Nand Nagri**

The school is located nearly 200 meters from Deputy Commissioners Office in North East district, on the Nand Nagri E-block square, Delhi. This school's main building was established in 1984. The other buildings were constructed later. The school runs in two shifts: Morning (700am to 1230pm) and Afternoon (1300pm to 1830pm).

### **Building Users**

The morning school is headed by Mrs. Asha Kumar (Principal). The task force of the principal consists of 14 male & 51 female teaching staff and a support staff of 3 male & 4 female. The school conducts classes from 1<sup>st</sup> to 12<sup>th</sup> standard and has strength of 2342 girls.

The afternoon school is headed by Mr. Hargyan Singh. The task force of the principal consists of 83 male teaching staff and a support of non teaching staff of 4 male and 3 female. The school conducts classes from 1<sup>st</sup> to 12<sup>th</sup> standard and has strength of 2774 boys.

### **The Buildings**

The school comprises four buildings as follows:

*Building 1:* The main building of pucca construction is a two storey building with an open courtyard. On either side of the courtyard are the stairs. There are three exits. There are a total of 31 class rooms and 6 other rooms in the main building.

*Building 2:* Single storey, semi-pucca construction with two stair on both ends.

*Building 3:* Hall, a pucca construction.

*Building 4:* Tin shed construction with 10 class rooms.

*The layout of the school:*

The main building and hall are 3 m apart. The main building and the tin shed and the semi-pucca buildings are more than 10 m apart, whereas the tin shed and semi-pucca are 3 m away from each other.

The main entrance to the school premises is on the main road and 20 m apart.

### **Open Area**

A big open area is in front of the main building where they have their assembly, and there is a large play ground on the left.



(Open Area)

### **Building Condition**

Building 1 has plaster falling at several places and the rusted rods are visible. The stairs are broken at most of the places. At several places in the toilets the ceiling is falling and the tiles are also not intact.



(Ceiling in the lobby)

## **Falling Hazards**

The school rooms are vulnerable to falling hazards like:

(a) Laboratories: Chemistry lab is in a separate room where as Biology & Physics are in the same room. The specimen, chemicals and the physics equipment are stored in the open on the table top. This makes the laboratory particularly vulnerable to fire / explosion during earthquakes. Maths, home science, social studies and geography have equipments kept every where. All of them also have 2-3 steel cupboards.



(Biology Lab)

(Chemistry Lab)

- (b) Library: There are two libraries in the whole school and the cupboards in which the library books are stowed have glass doors thereby increasing the hazards.
- (c) Corridor: The corridors are used as a storage area for the steel cupboards and they are also used for conducting classes hence benches are every where.



(d) Class rooms: The fans and light connections are vulnerable. The windows are broken. In the tin shed the Tin sheets are broken at many places



(e) Principal's Room: The Principal's Room has a number of cupboards and trophies which are not secured properly. They also have television and computers.

(f) Staff Room: All the walls of the staff room have cupboards lined up against them.



## **Sarvodaya Kanya Vidyalaya Girls School, Pandara Road**

The school is located nearly 1 km from India Gate on Pandara Road. This school was established in 1964. The school has only a morning shift.

### **Building Users**

The school is headed by Mrs. Mira Bhagat (Principal). The task force of the principal consists of 28 female teachers and a support staff of 2 males and 4 females. The school conducts classes from 1<sup>st</sup> to 12<sup>th</sup> standard and has a strength of 743 girls and 21 boys in senior classes whereas 78 boys in primary section.

### **The Buildings**

The school comprises two buildings as follows:

*Building 1:* The Main building is of pucca construction and is a single storey building. There are two staircases – one near the main entrance and the other at the other side of the building. It also has a small courtyard in the middle. The hall is the part of the building. There are a total of 19 class rooms and 11 other rooms (library and laboratories etc) in the buildings.

*Building 2:* The L shaped second building of semi pucca construction is used for the primary section.

*The layout of the school:*

The distance between the main building and the semi pucca building is around 2 m.

### **Open Area**

A big playground (15 x 20 m) is available for children on the left of the building , but a 5 storey building stands next to it makes it a dangerous open space during earthquakes. The school's main gates (two in number and 10m apart) open to a huge playground called the Pandara Park.

### **Building Condition**

Building 1 looks to be in good condition and is maintained by PWD.

Building 2 has a ceiling made up of stone slabs sitting on the iron rail bars.

### **Falling Hazards**

(a) Laboratories: Chemistry lab is in a separate room whereas Biology & Physics are in the same room. The specimen, chemicals and the physics equipment are stored in open on the table top. The presence of a number of LPG cylinders used for conduct of practical in home science lab increases the vulnerability of this compartment during disasters. However, the presence of a number of fire extinguishers stowed properly in the room reduces the risk to a certain degree. Maths, social studies and geography labs have equipments kept every where. All of them also have 2-3 steel cupboards.



(CAL Lab)

- (b) Library: The cupboards in which the library books are stowed have glass doors thereby increasing the hazards.



- (c) Corridor: The corridor is 1.5 m wide in the main building while it is approx 0.5 m wide in the semi pucca building. The corridors in both buildings are clutter free.

- (d) Class Rooms / Hall: The fan and light connections are not secured properly. The Hall has fans with long rods. The fans in building 2 are not clamped to the ceiling properly.

- (e) Principal's Room: The Principal's Room has a number of cupboards and trophies which are not secured properly. The room also have television and computers.

- (f) External Falling Hazards: The school has over head tanks for water (two on the building1 and one on the building 2).



(Over head tanks on building1)

**Other Information:**

They have six fire extinguishers. They are very regular with fire drills.

## **Sarvodaya Kanya Vidyalaya Girls School, Kanjhawala**

The school is located nearly 100 m from the Deputy Commissioners Office in Kanjhawala on the Kanjhawala Road. This school was established in 1968. The school has only morning shift.

### **Building Users**

The school is headed by Mrs. Savitri Bai (Principal). The task force of the principal consists of 44 teachers and a support staff of 5 males and 3 females. The school conducts classes from 1<sup>st</sup> to 12<sup>th</sup> standard and has a strength of 1291 girls.

### **The Buildings**

The School comprises four buildings as follows:

*Building 1:* Pucca construction, has 5 rooms used by the administration.

*Building 2:* One semi pucca structure which was constructed in 2003 is single storey building.

*Building 3:* Semi pucca structure

*Building 4:* L shaped tin shed.

### *The layout of the school:*

The distance between the building 1 and the building 2 is around 1.5 m. The distance between the building 2 and building 3 almost 1 m and the distance between building 2 and building 4 is more than 3 m.

### **Open Area**

The school has two open spaces. The one between buildings 2 and 4 is about 5 x 7 m. The other open space is 15 x 20 m on the right side of the building 2.



(Left of building 2)



(Right of building 2)

### **Building Condition**

Building 1 looks to be in good condition. Building 2 which was inaugurated in 2003 had major cracks by 2004. That building is no longer in use and has fence on all sides.



(Building 2)

## **Falling Hazards**

(a) Laboratories:. The presence of a number of LPG cylinders used for conduct of practical in the home science lab increases the vulnerability of this compartment during disasters. They also have typing and laboratories to train in beauty treatment. Maths, social studies and geography labs have equipments kept every where. All of them also have 2-3 steel cupboards.



(Beauty lab)



(Typing Lab)

(b) Library: The library is inside the hall/ auditorium. The cupboards in which the library books are stowed have glass doors thereby increasing the hazards.



(Library/Hall)

(c) Corridor: The corridor is 1 mtrs wide and clutter free

(d) Class Rooms / Hall: The fan and light connections are not secured properly. The Hall has fans with long rods.

(e) Principal's Room: The Principal's Room has a number of cupboards and trophies which are not secured properly. The room also have television and computers.

## Government Sarvodaya Bal Vidyalaya, Bijwasan

The school is located nearly 500 meters from Bijwasan railway station. This school's main building was established in 1953-54. The other buildings are fairly new. The school conducts classes in one shift, Morning.



(Plan of the school)

### **Building Users**

The school is headed by Mr. S. C. Yadav (Principal). The task force of the Principal consists of 36 male and 4 female teaching staff and a support staff of 4 males and 4 females. The school conducts classes from 1<sup>st</sup> to 12<sup>th</sup> standard and has a strength of 1161 boys and 54 girls (in primary section).



## **The Buildings**

The school comprises five buildings as follows:

*Building 1:* The main building of pucca construction has a ground and a first storey. There are two staircases on either side of the L-shaped building. There are a total of 29 class rooms and 16 other rooms (library and laboratories etc) in the buildings.



*Building 2:* The second building is a pucca construction with 5 rooms.

*Building 3:* The third building is of tin shed construction and houses 7 class rooms

*Building 4:* The fourth building is of tin shed construction and houses 5 class rooms



*Building 5:* The fifth building is of semi- pucca (ceiling is made up of stone slabs and iron I beams hold them) structure mostly used for the primary section.

*Building 6:* There is one administrative block of pucca construction consisting of three rooms (principals, examination and principals admin staff)

*The layout of the school:*

The main building and second pucca construction is 2m but a temporary construction joins them and is used as a storage space.



**Open Area**

It has a big open area behind the building1 and a 10 \* 20 m between the school entrance and the administration block.

**Building Condition**

In the first look the buildings condition is good.

## **Falling Hazards**

The school is vulnerable to several falling hazards as:

(a) Laboratories: Chemistry, Biology & Physics lab are in separate rooms and are different for both the schools. The specimen, chemicals and the physics equipment are stored in open on the top of the table. There are charts and other training aids all over the room. Maths, home science, social studies, geography and CAL laboratory have equipments kept everywhere . The school has a computer lab on the first floor of the main building. The CPU find their place on tables and one UPS sits next to the entrance. All of them also have 2-3 steel cupboards. This lab has few LPG gas cylinder for the purpose of practical.



(Chemistry Lab)



(CAL Lab)



(Biology Lab)

(b) Library: There are two libraries with 5500 books in the whole school and the cupboards in which the library books are stowed have glass doors thereby increasing the hazards.



(c) Corridor : Corridors are clutter free.

(d) Class rooms: The fans and light connections are vulnerable.

(e) Principal's Room: The Principal's Room has a number of cupboards and trophies which are not secured properly.

(f) Staff Room: All the walls of the staff room have cupboards lined up against them.



### **Other information**

The school has a nodal disaster management teacher. They have been practising fire drill as a part of which they evacuate and assemble in the courtyard. None of the teachers know how to use fire extinguishers.

**Government Boys Senior Secondary School /Government Girls Senior  
Secondary School, Pushp Vihar**

The school is located nearly 1 km from Deputy Commissioners Office in South Delhi on M. B. Road. The school's main building was established in 1981. The other buildings were constructed later. The school conducts classes in two shifts: Morning (700am to 1230pm) and Afternoon (1300pm to 1830pm).

**Building Users**

The morning school is headed by Mrs Neera Sharma (Principal). The Task force of the Principal consists of 1 male & 41 Female teaching staff and 3 male and 3 female non teaching staff. The school conducts classes from 6<sup>th</sup> to 12<sup>th</sup> standard and has a strength of 1470 girls.

The afternoon school is headed by Mr. Ramesh Chand. The Task force of the Principal consists of 35 teaching staff and 7 non teaching staff. The school conducts classes from 6<sup>th</sup> to 12<sup>th</sup> standard and has a strength of 1021 boys.

**The Buildings**

The school comprises three buildings as follows:

*Building 1:* The main building of pucca construction is a two storey building with an open courtyard. On either side of the courtyard are the stairs. There are three exits.

*Building 2:* This building is L shaped, single storey, semi-pucca construction with two stair on both ends.

*Building 3:* A pucca construction, is the hall.

*The layout of the school:* The main building is 50 m away from the entrance of the school. The main building and the semi-pucca buildings are more than 5 m apart, connected by a 1m RCC corridor.



(The connection between the two buildings)

### **Open Area**

It has a small open area in front of the school.

### **Building Condition**

Building 1 has plaster falling at several places and the rusted rods are visible. The stairs are broken at most of the places. There is a gap of 2 feet between the boundary wall of the school and the left wall of Building 1.



(roof over the stair)

**Falling Hazards** The school is vulnerable to falling hazards inside the rooms such as:

(a) Laboratories: Chemistry, Biology & Physics labs are in separate rooms and are different for both the schools. The specimen, chemicals and the physics equipment are stored in open on the top of the table. There are charts and other training aids all over the room. Maths, Home science, social studies, science lab (for 6<sup>th</sup> to 10<sup>th</sup>), Geography and CAL Laboratory have equipments kept everywhere. All of them also have 2-3 steel cupboards.



(Chemistry Lab)

(b) Library: There are two libraries with 5500 books in the whole school and the cupboards in which the library books are stowed have glass doors thereby increasing the hazards.

(c) Corridor: The corridors are used as a storage area for the steel cupboards and they are sometimes used for conducting classes.

(e) Toilets: The ceiling has the iron rod like the rail used as support. Moreover the tiles are also very loose.

(e) Classrooms: The fans and light connections are vulnerable. Some rooms have televisions located on wall stands.



(Examination room)

(f) Principal's Room: The Principal's Room has a number of cupboards and trophies which are not secured properly.

(g) Staff Room: All the walls of the staff room have cupboards lined up against them. They also have an LPG cylinder for the personal use.



(Staff Room)

### **Other information**

The school has a nodal disaster management teacher. They have been practising fire drill as a part of which they evacuate and assemble in the courtyard. None of the teachers know how to use fire extinguishers.