



**Concept Presentation  
School Building Renovation  
At Jorpati**

# Existing Scenario



Unfinished interior layout



Haphazard elevation, different window sizes



Broken plaster works, no grills



Water logging inside building



Unfinished exterior, broken windows & door,  
absence of floor slab in 1<sup>st</sup> floor



No proper planning of floors



Unfinished floor and railings



Use of different materials

# Scope of Renovation

# Floor Zoning

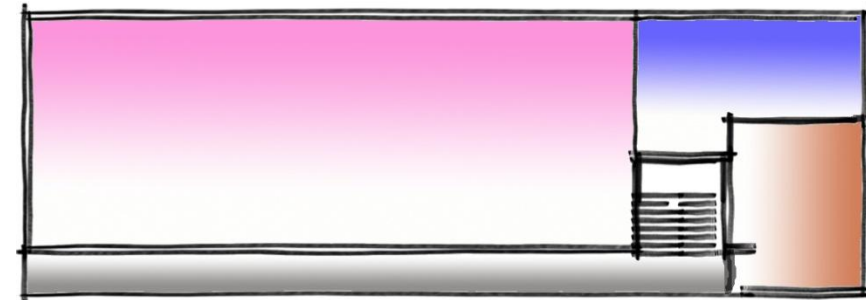
## Ground Floor

- Kitchen/ Dining
- Classrooms
- Toilets
- Computer Lab



## First Floor

- Classrooms
- Library
- Toilets



## Second Floor

- Girls' Dormitory
- Study Area
- Toilets

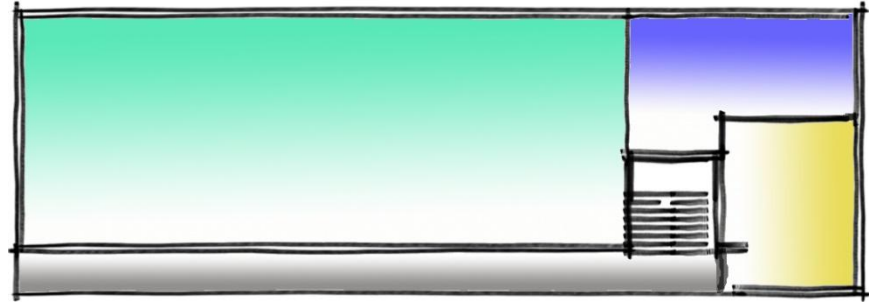




# Floor Zoning

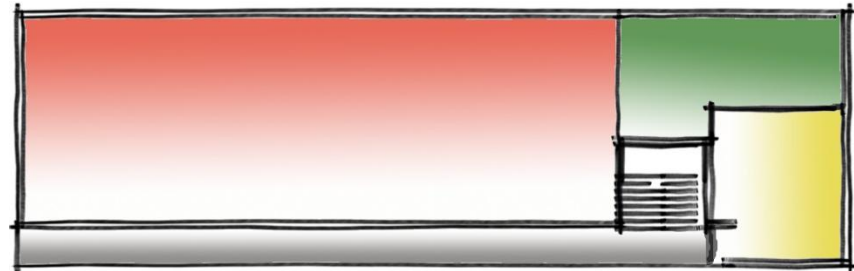
## Third Floor

- Boys' Dormitory
- Toilets
- Study Area



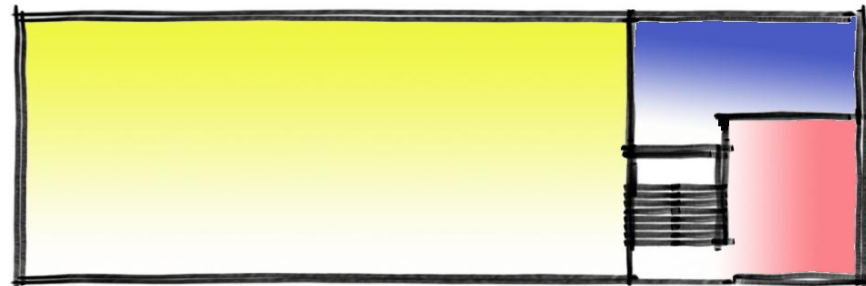
## Fourth Floor

- Suites
- Meeting Room
- Office (Staffs)



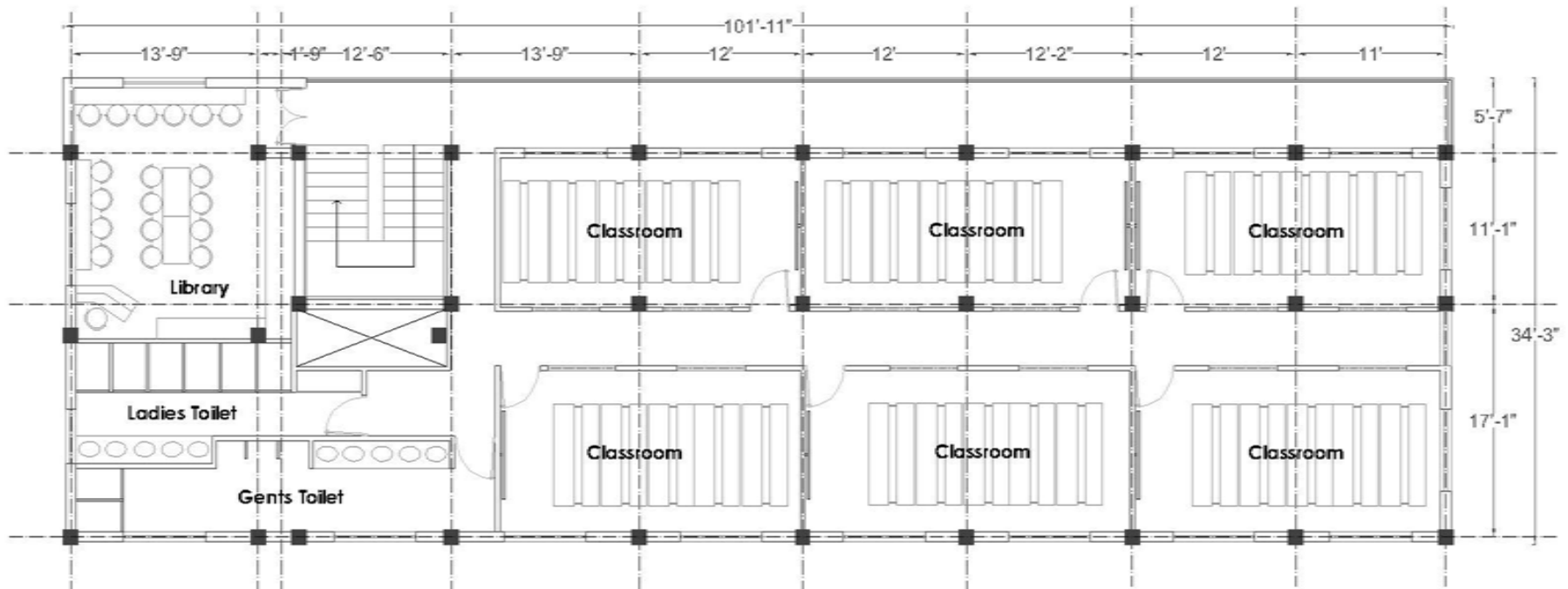
## Fifth Floor

- Principal's Office
- Terrace
- Puja Room



# Planning of Each Floor

Example:

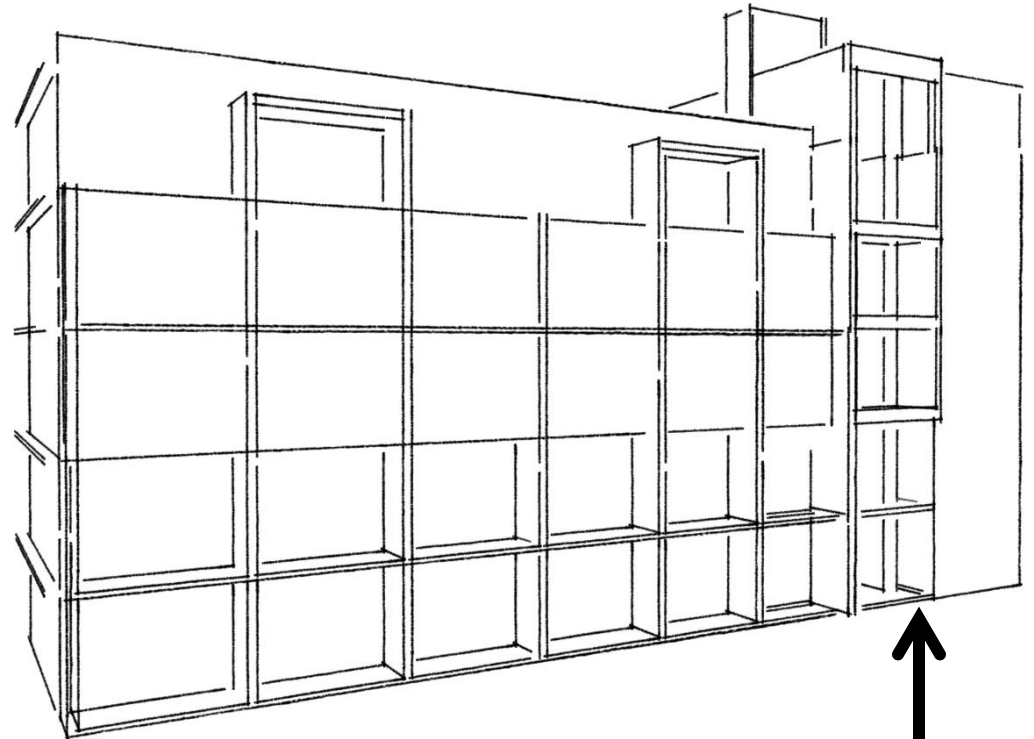


Typical Plan with Classroom

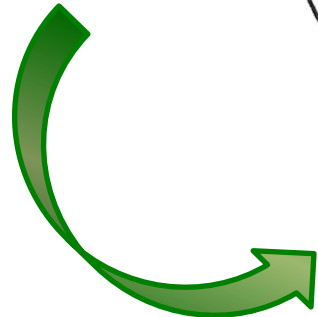
# Design of Elevation



Existing Elevation



Proper Elevation Treatment





# Renovation Works

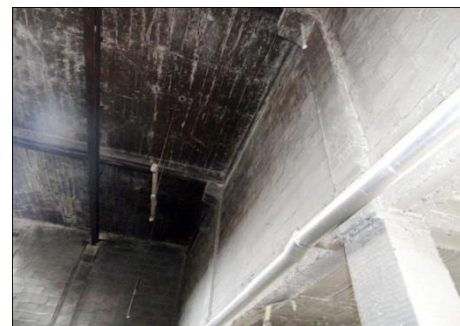
- **Floor finish**
- **Plastering**
- **Painting**
- **Change Door/ Windows frames and shutters**
- **Add grills in windows**
- **Wall additions or Removal/ Change of railings, etc. as per design**
- **Electrical layout**

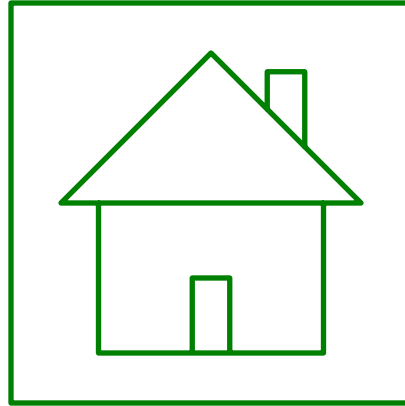
# Renovation Works

- Lower ground level to curb water logging inside ground floor

- Addition of floor slab in first floor

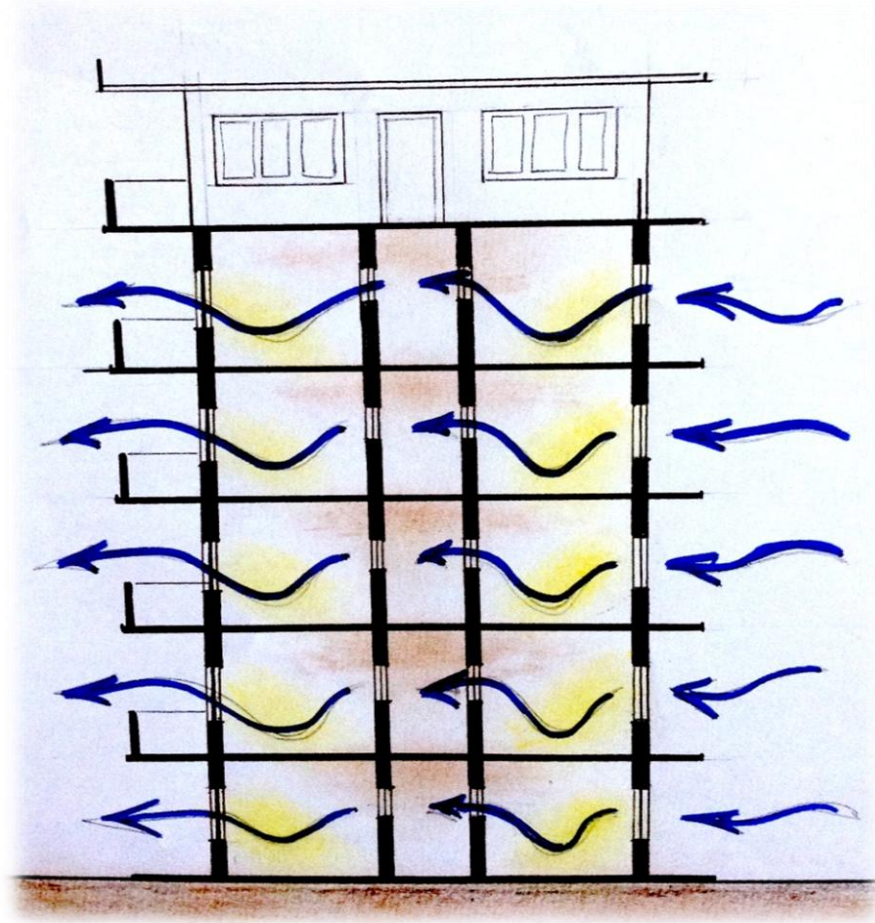
- Provision of Toilet in each floor





# Green Design Features

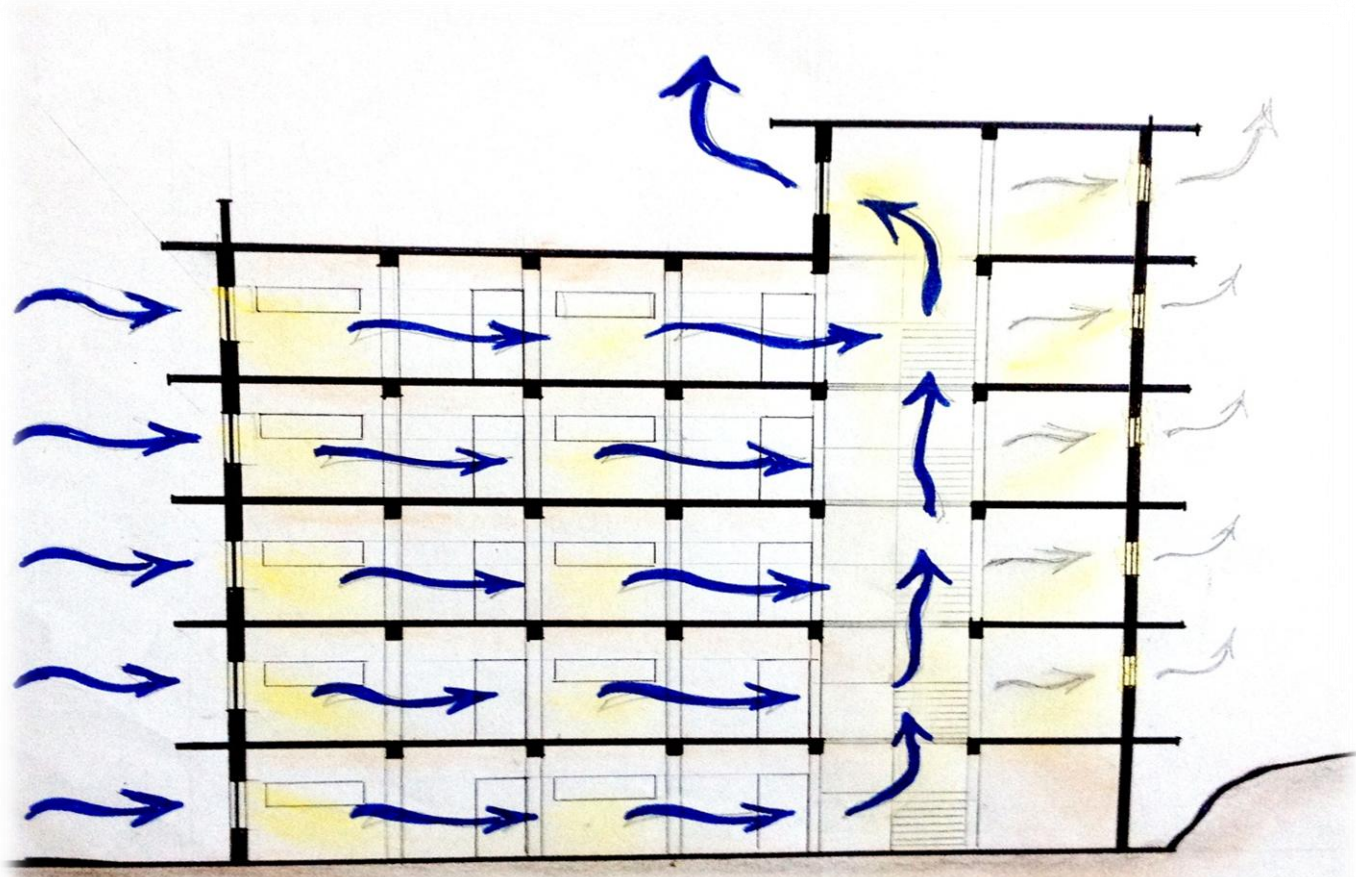
# Natural Ventilation



**Cross-Ventilation Design**



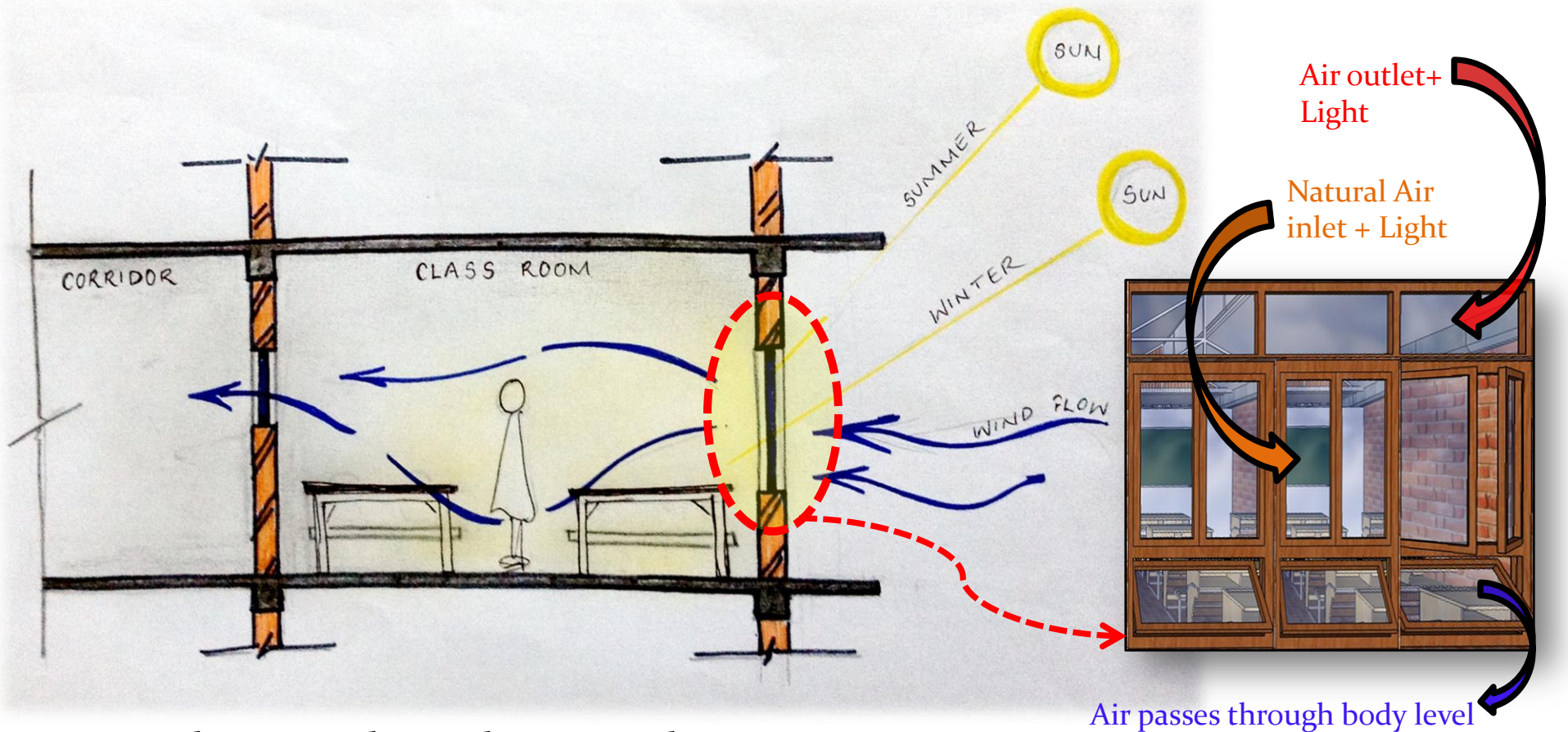
# Natural Ventilation



Stack effect through light well behind staircase



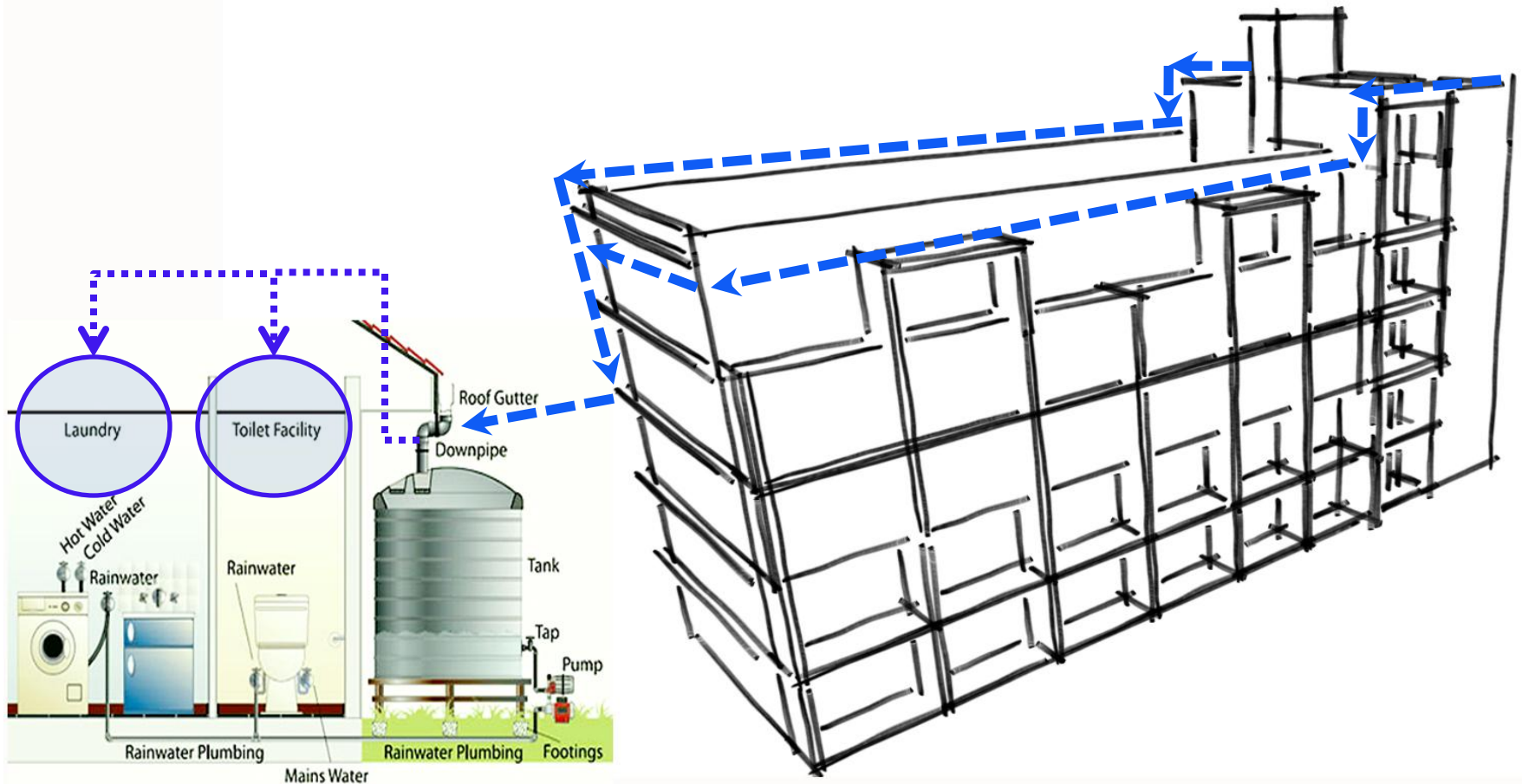
# Lighting and Ventilation



Lighting and ventilation in classrooms

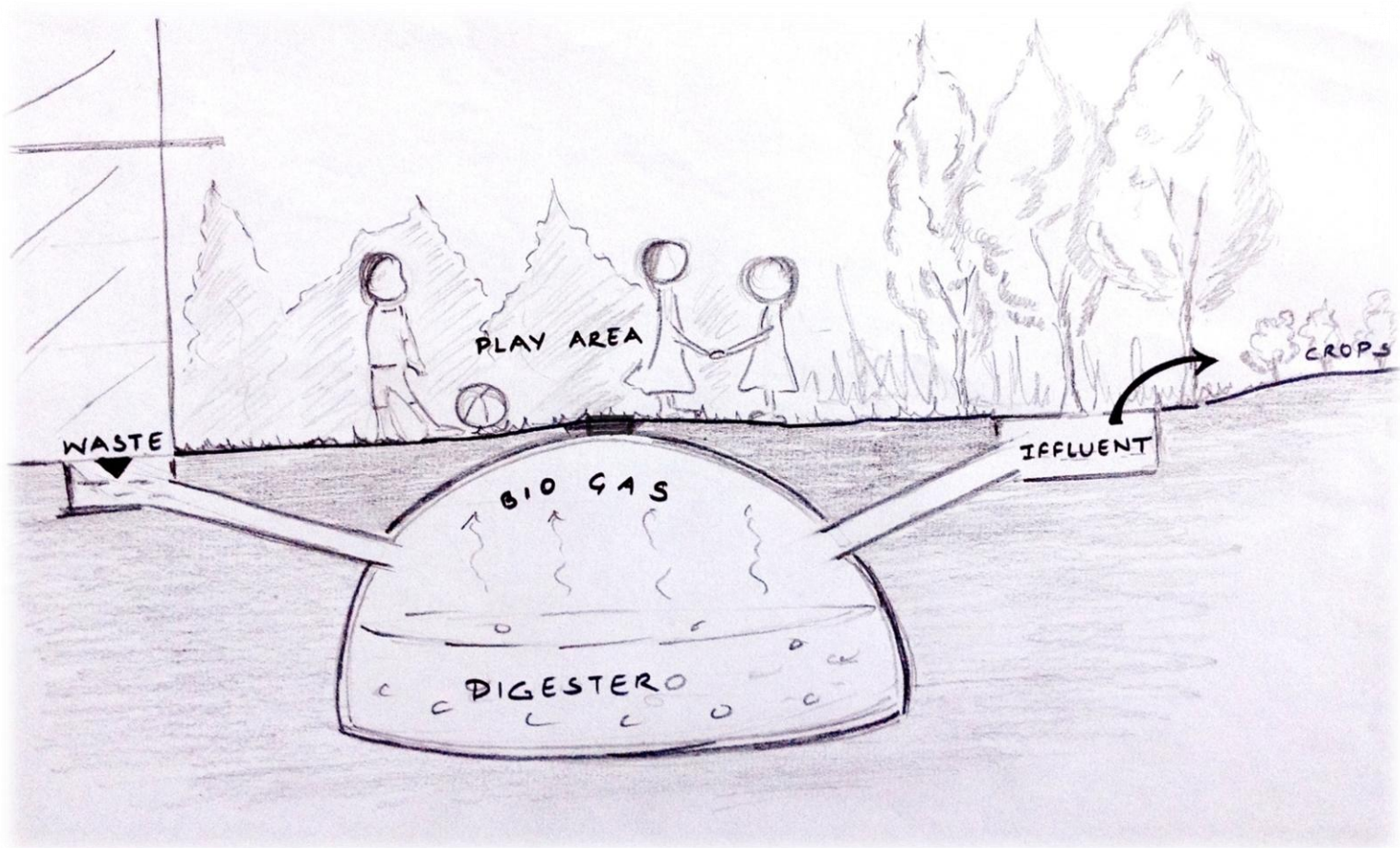
Typical window design for proper ventilation

# Rain Water Harvesting



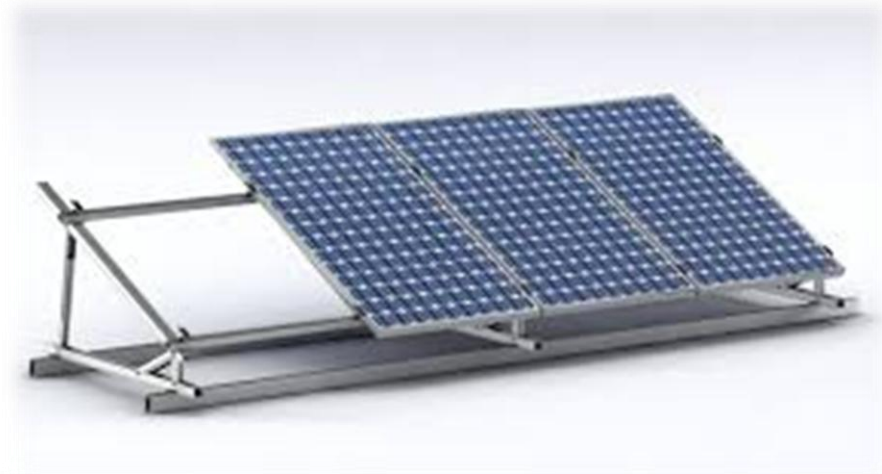


# Provision of Biogas



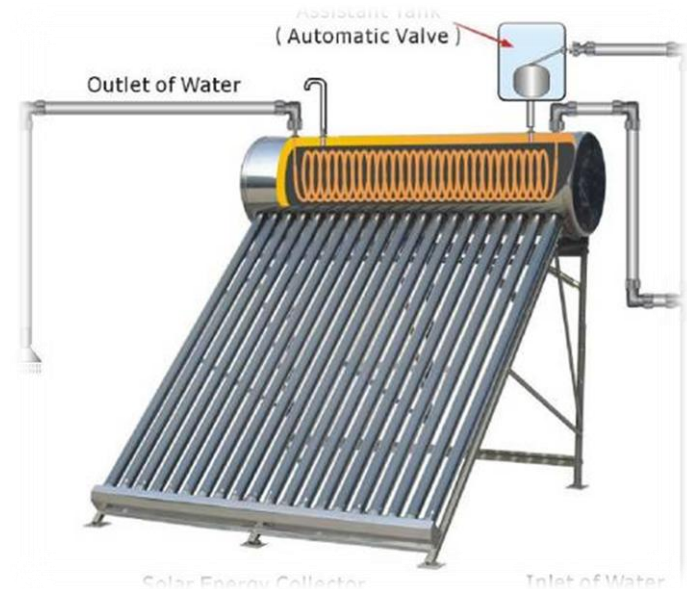
Underground Biogas system with Play area for students on top

# Solar Panel and Solar Thermal



30 Units of Solar panels for Electricity, 24 batteries, 2 charge controller and 1 inverter

- CFL Lights (70)
- LCD TV (6)
- Computers (37)
- Laptops (5)
- Printer Water dispenser (1)
- Two door fridge (1)



Use of solar thermal for heating water for residential use in school

Thank You!