

## Green House/ Poly House

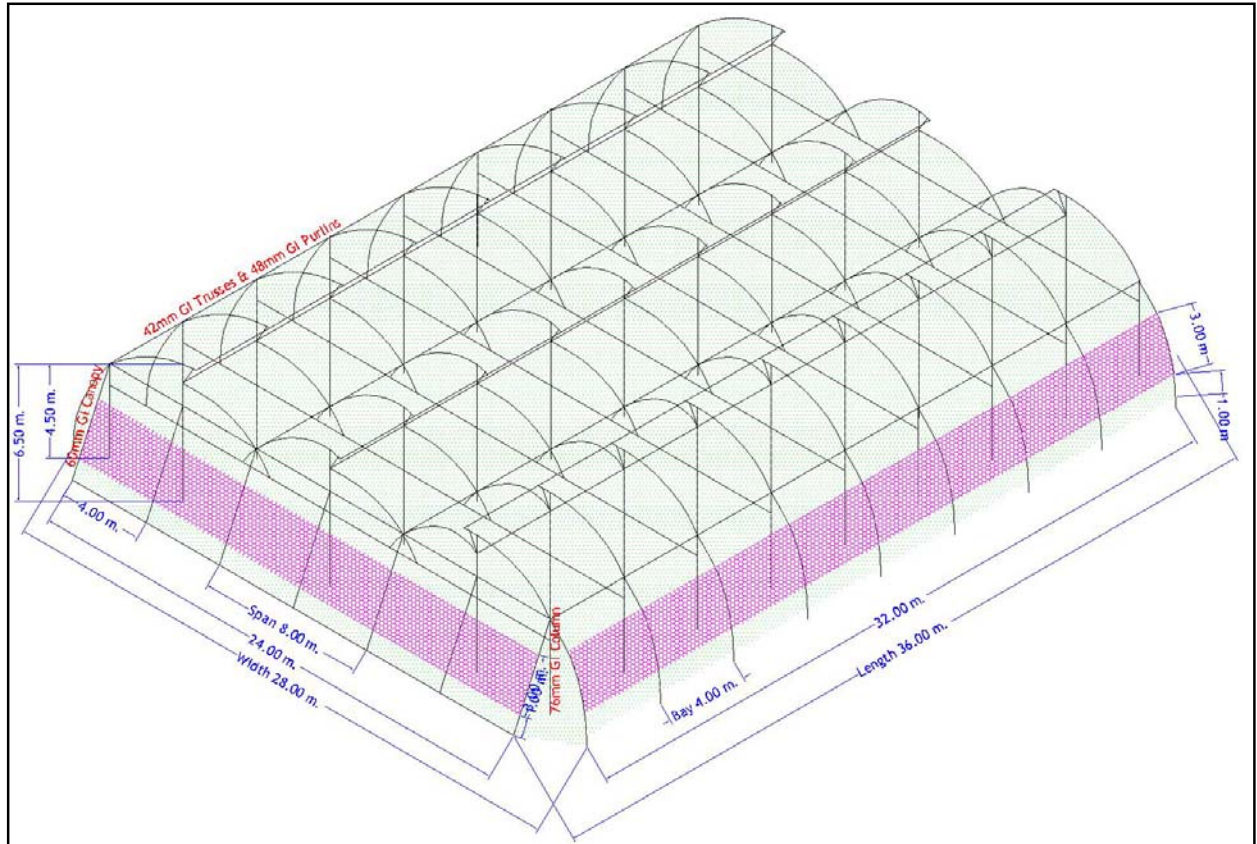
### Estimate of Investment

| Sr. | Particulars  | Unit | Area | Rate | Value Rs.        |
|-----|--|------|------|------|------------------|
| 1   | <b>Natural Ventilated Green House</b> Supply & Installation (GI Pipes, UV Stabilized 200 Micron Film, Agri Shade Net, Insect Net (50%), Foundation, Fabrication, Erecting & Fixing of UV Film & Net) | Mtr  | 4000 | 710  | <b>28 40 000</b> |
| 2   | <b>Land Development</b> with application of Fumigations with H2O2 collateral silver & Bed Preparation with Internal Roads, Materials cost and labour charges.  | Mtr  | 4000 | 88   | <b>03 52 000</b> |
| 3   | <b>Drip &amp; Fogging System</b> Supply & Installation   | Mtr  | 4000 | 112  | <b>04 48 000</b> |
| 4   | Tissue culture <b>Planting Materials of Vegetables</b> or Flowers,   | Nos  | LS   | 10   | <b>01 25 000</b> |
| 5   | <b>Automation System</b> Supply & Installation (with Fertigation & EC PH system)   | Nos  | —    | 0    | <b>00 00 000</b> |
| 6   | Total Investment cost  |      |      |      | <b>37 65 000</b> |
| 7   | Eligible for Subsidy of NHB @ 50 %   |      |      |      | <b>18 50 000</b> |

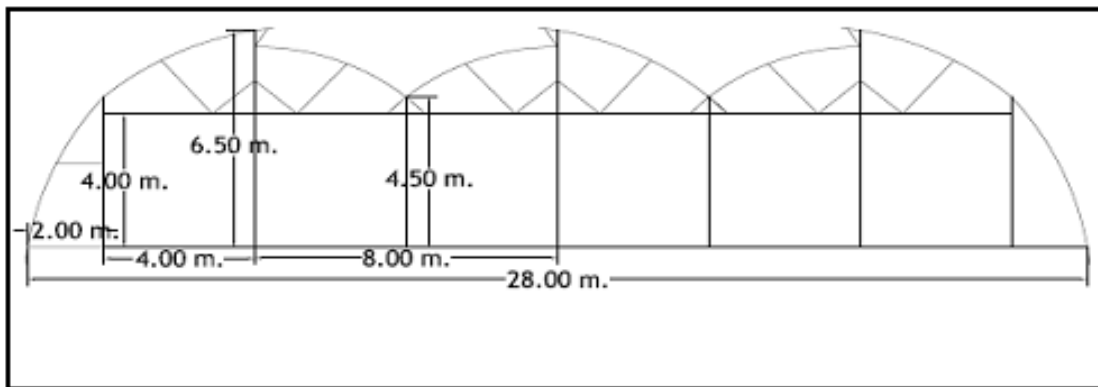
\* Planting material cost may differ crop wise.

\* Respective Government policy

## Over View



## Front View



## ***Main features***

- *Structure can resist wind velocity up to 120-130 km / hr*
  - *Total Vertical Load 10-25 Kg/sqm.*
  - *Anti insect net 25-50 mesh*
  - *Side curtains 50 mesh*
  - *Roof curtain 25 mesh*
  - *Polyethylene 200  $\mu$  UV*
  - *Structure GI Pipes*
  - *Air Circulation Fans*
  - *Post distance 4 mtr*
  - *Gutter height 4 mtr*
  - *Gable 8 mtr*
- ✓ *Aerodynamic Design:* *Aerodynamic Shape along Periphery This shape is given to drift away wind flow and minimize the wind impact on the sides of Greenhouse to ensure maximum strength of structure against wind, Column runs up to top of the Greenhouse to ensure maximum strength to the structure.*
- ✓ *Anchoring Foundation Column:* *Formation level of Greenhouse are perfectly maintained in concrete ensures resting of main column on concrete.*
- ✓ *G.I. Pipes structure with Hinge Joint:* *GI Pipe members are joined to each other by means of clamps, angle brackets & nut bolts which ensures more strength against the vibrations caused by wind.*
- ✓ *8 mtr. X 4 mtr. Structure Gird:* *Multispan structure having 8 mtr. truss span and 4mtr. distance between two trusses.*
- ✓ *Top Ventilation:* *10 % (800 mm) clear opening placed at top to ensure better ventilation and 600 mm overlap to avoid direct entry of sunlight into Greenhouse.*

✓ *4 mtr. Gutter Height: This height is from foundation formation level to bottom of Gutter. Total height of the structure is 6.5 mtr.*

✓ *Curtain opening along periphery: This system allows to minimize or maximize side ventilation as per the requirement and ensure outside cold air to flow inside and push inside hot air to outside from top ventilation. Also by closing side ventilation one can block Co<sub>2</sub> exhausted by plant inside the Greenhouse during night & use the same in morning to increase photosynthesis of the plant.*

✓ *Curtain Flap Controls: Avoids the outside flapping of polythene curtain ensure more life of the side polythene*

➤ *Foundations are aligned by theodolite and dumpy level. Levels of concrete are maintained as per the slope required resulting proper resting of main column on the concrete.*

➤ *Straightness of the bottom chord is maintained for any length of the Greenhouse by means of perfect mathematical calculations, resulting more strength & good aesthetical appearance to the structure.*

➤ *Optimum radius for top chords which results in to less wind pressure which vents and avoid lifting of top polythene and also reduces wind pressure due to aerodynamic design.*

➤ *Flap control pipe that avoids the flapping of curtain paper & reduces maintenance due to wind pressure. Extra purling is provided along periphery with aluminum gripper who increases strength of structure and also increases life of side polythene.*

➤ *Curvature at the bottom surface for perfect fitting on the pipes and radius is given to the edges where polythene under stress.*

- *Trapezoidal shaped gutter in single piece made from G.P. sheet coil and are placed on the structure by means of modern technology.*
- *All the fixtures are made from hot deep galvanized like clamps, Nut Bolts are used for installation.*
- *Bended / Hockey stick type corridors are used along width of the Greenhouse. Straight corridors are used along length of Greenhouse to stop displacement of main column from heavy wind resulting more strength to structure.*
- *Erection of the structure by our own developed technology and by conventional method using scaffolding etc. No pressure / pre-stress remain in the member after erection. Experienced team of engineers from Green Gujarat selects the orientation of the Greenhouse by studying the local topography & Metrology.*