VISITOR'S CENTER - AUROVILLE

A demonstration building in Alternative Building Technology and renewable energy.
LOCATION AND PURPOSE OF THE BUILDING

- The project is located in Southern India in Auroville an International township.
- It is the reception centre for the hundreds of visitors who visit Auroville everyday wanting to be informed about the aim of Auroville and its development.
- It is a demonstration complex for alternative technologies such as appropriate building technologies, land reclamation and afforestation, renewable energies, water management and waste recycling techniques etc.
- It has been the field of training for the local villagers who build it, thus experienceing soil block making and building techniques, to mobilise them to self build using earth.
The Auroville Building Centre (AV-BC) is a research cum training organization in Appropriate Building Technology which forms part of the national network of Building Centres set up with HUDCO's assistance.

The Auroville Building Centre (AV-BC) has two specialities until now: earth and ferrocement technologies. AV-BC also produces a whole range of prefabricated ferrocement elements.

The Auroville Visitor's Center has been designed and is built by the AV-BC as a demonstration project for alternative technologies.
Appropriateness to the locally prevailing conditions was found to be a major requirement:

- **Appropriate to the climate**: The climate in the area being hot and humid, natural ventilation is a must for comfort, but during the hottest part of the year, there is almost no breeze, we have used passive solar ventilation techniques using solar chimney which by heating up causes wind draft in the room below it.

- **Appropriate to the skills available**: Auroville is in a rural area of the state of Tamil Nadu in India. The local population is mainly farmers who have less and less to do in the fields as their lands are very impoverished. Their building skills are very rudimentary.

- **Appropriate to the locally available material**: Here, fired bricks are of very poor quality, but the soil of the area is very suitable for making blocks.

- **Appropriate to the energy situation**: (repeated load shedding). As the building will not be connected to the grid of the Tamil-Nadu Electricity Board but will tap only renewable sources of energy, a special emphasis had to be laid on natural lighting and ventilation.

- **Appropriate to the economic situation**: The building had to be built using low cost techniques to reduce the cost per square metre to create a viable alternative.
GUIDING PRINCIPLES FOR THE CONCEPT OF THE BUILDING

The building had to lend itself to be used by various types of people, had to be inviting for visitors who would be drawn to explore the space and become aware of the possibilities offered by various appropriate technologies.

The requirement for the building was as follow: information office, exhibition spaces, restaurant, video-room, shop for handicrafts, conference facilities, toilets and an open air amphitheatre as a focal point.

In order to reduce the cost and simplify the construction, it was decided to adopt a grid pattern of 4 meters x 4 meters in which the pillars are load bearing and all openings are arched or corbelled.

The build-up area is about 1,200 m² and soil stabilized blocks was used to build the pillars and arches, some spaces are covered with domes constructed with (5 cm thick) soil stabilized blocks which at times has a first floor above it. Some other spaces are covered with prefabricated ferrocement channels which, at times too, has a first floor above it.

Taking into consideration India’s diminishing forests, the cost of wood and its vulnerability to termites, its usage has been forsaken.