



Interview with Prof. Charanjit S Shah

Founding Principal Architect, Creative Group, New Delhi



Que.1 What was your first reaction when the design for Chennai's new terminal came on your drawing board?

Ans. Development of Chennai airport was through a global design competition. We won the global design competition and were awarded the project by the Airports Authority of India (AAI). It consists of a new domestic terminal with 10million annual capacity, and an international terminal with four million annual capacities, along with a multi-level car parking with 1200 car parks, elevated road connecting the glass tube, metro station and allied city side development. My first and spontaneous reaction, when we started the design in the constraint city side development in Chennai was to make a sustainable green terminal so as to conserve energy and other natural resources. We evolved the design through a simple, efficient passenger flow and created a terminal building which is day lit with maximized daylight and minimized heat gain within the terminal building.

Que.2 What are the salient features of the design?

Ans. As airports are the gateways to a city and particularly Chennai being an important commercial hub for South India, we aspired to have an iconic global innovative structure, but on the other hand also respecting the local blend and catering to the various requirements as per the climatic conditions. The terminal building is designed as an H-shape with a central green spine having the innovative vertical garden to create a smooth and pleasing environment particularly for the arriving passenger while passing through the glass tube. For the conservation of energy, an attempt has been made to adhere to the Energy Conservation Building Codes (ECBC). Conservation of water is attained by recycling through advanced sewerage treatment plant as well as effluent treatment plant. We have also carried out the rainwater harvesting to recharge the ground water. Proper care has also been taken to avoid soil erosion.

Que. 3 Creative Group always has a distinct design element in each of its structure, a piece of art that is irreplaceable in its other designs. What makes Chennai's design different from the other airports that you have designed?

Ans. We were fortunate to have won four global/national design competitions for Chennai, Goa, Raipur as well as Vadodara airport. It has been rightly said that our endeavor has always been to create absolutely different designs for each of the airports, but also keeping in view the basic requirements in terms of ease of passenger flow and creating visual panoramic delight, to the passengers, while in and around the terminal building.

Chennai is one of the first greenest airports as said the Architectural Record U.S.A, and also has been awarded the best infrastructure project of Tamil Nadu. It has one of the largest cantilevers of 25m on the city side, amongst airport worldwide. This is one of the airports, where four modes of transportation i.e metro, railway, surface and air are inter-connected through a glass tube which has 38 walkalators.

Que. 4 What would you suggest the travellers through the portals of the new Chennai Terminal to look out for, to make note of and most importantly to enjoy?

Ans. The Chennai airport would give a global experience for the passenger, while departing or arriving. Wherein one passes through variety of experiences, visualizing the vastness of spaces and the virginity and transparency of the structure, new innovations, advanced technological system with glare free natural light in the entire terminal. Passing through the arrival tube, particularly looking at the vertical garden and central green spine creates a very healthy and soothing environment particularly after having a jet-lagged journey.

Que. 5 What were the challenges and hurdles encountered during project and working with the government as a client? How was the experience of having global associates as your co-consultants?

Ans. Being a government project we were very conscious in creating of proper tender documents, condition of contracts, detailed specification and good for construction drawings, so that it adheres to the norms as laid on by the central vigilance, central audits as well as the CPWD norms. All the diversified works, approvals and working in the large government set-ups was a big challenge which was handled by us very professionally and we could probably say that we have been able to complete a mega-project of Rs 2015 cores in a period of 40months, having a covered area of more than two million square foot. Due to many innovations and induction of many new elements in Chennai Airport, we had to innovate new methodologies of erection and construction which helped us in timely and smooth finishing of the project. As all of us are also aware, that Chennai airport is a running airport, we were pressed with availability of space within the site. Therefore some of the elements were fabricated off the site to enable smooth running of the existing airport. We could overcome the challenges and hurdles in such large complexes because of the best of the team of consultants for all specialized works. This provided us with appropriate knowledge, understanding and techniques for proper execution at site. The major/minor deficiencies and defects could be avoided due to a very expert team of consultants.

Chennai airport has been a very exciting and challenging experience for all of us having a dual team of consultants in abroad as well as India. The commonality of professional understanding and reasoning enabled us to comfortably transfer the technology and new global innovations to be constructed locally in India. We had also very successfully gone through the bureaucratic challenges and approval through the various ministries, planning commission etc. Working with global consultants broadens our perspective to look beyond imagination. We with global exposure have learned to be proactive in our documentation, detailing and specification along with estimates in pre-tender stage itself. Our global associates were also pleasantly surprised to see our professional work culture and vision to deliver a world class infrastructure involving new technology and complex planning demanding coordination with multiple specialists.

Que. 6 You have a passion and zeal for sustainable green architecture, what is your vision for the future?

Ans. Since the inception of my architectural practice I have been very conscious in my designs to be sustainable and respecting the Mother Earth. The concept of sustainability particularly through passive strategies became my mission. Maximizing daylight and minimizing heat gain in hot-dry and composite climate is one of the major concerns of planning. Conservation of water and energy by use of natural process of recycling, reuse and making the built environment off the grid is what perhaps is Net Zero. We need to look beyond net Zero. New technological advancements should be amalgamated to achieve sustainability in all aspects. Having the passion and zeal to design sustainable green buildings, I can confidently say that my endeavor is to look beyond net zero in our forthcoming projects.