

National Seminar on High Rise Development 12th Oct 2014, Raipur (C.G.)



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Prof. Charanjit S Shah

Founding Principal, Creative Group

Bachelor of Architecture, School of Architecture & Planning, New Delhi (1970)

Registered Architect CA/75/24; (CoA)

Fellowship with Indian Institute of Architects Mumbai (1980); Fellowship with Institution of Valuers (1987)



Architect, educationist, author & academician, Prof. Charanjit S Shah established Creative Group in 1973 with a sincere approach towards Green Architecture in India.

He is a visionary and a legend in creating Urban Infrastructure like Airports, Metro stations, Intermodal Hubs, Railway Stations and large Urban Planning Projects besides creating educational, Institutional, Housing complexes which are highly sustainable & eco-friendly. He is instrumental in creating and reshaping Jamshedpur City into a Smart City and giving shape to the Vision plan 2057.

Mega Chennai Airport Project, Raipur Airport, Vadodara & Goa Airports, T3 and T1C Terminal for Retail Design, Bus Bay expansion for T1D, IGI Airport, New Delhi are some of the mass transit projects to his credit. Besides these Intermodal Hubs for Chennai Metro station, Koba, Vadaj, Akshardham & Paldi stations at Ahmedabad-Gandhi Nagar Metro Stations (MEGA) are some of the landmark projects. Railway stations at Navi Mumbai & Naya Raipur are futuristic & innovative Infrastructure projects which have been recently awarded. His contribution towards creating Sustainable Architecture in Office buildings, Housing Projects, Institutions & campuses have also been awarded Nationally and Globally.

With an inclination towards teaching, he joined SPA, New Delhi in 1996 as a faculty & thereafter became the Director at Vastu Kala Academy, New Delhi. His passion for architectural education made him an honorary recipient of Professor Design Chair from the Jamia Milia Islamia University in New Delhi. He has authored several books on Architecture like Kitchen, Bathroom, Water supply & sanitation with emphasis on broad explanation of building services & management, structure, professional practice, etc. The *"Architects' Handbook - A Ready Reckoner"* authored by Prof. Shah is a de-facto standard text used for academic & professional community.

Prof. Shah has been the Chairman of the Indian Institute of Architects, Chairman - SAARCH, Founder Secretary General, Guild of Practicing Architects, Secretary General & Chief advisor, Archi Design Perspective, New Delhi, Professional advisor, J.K.Architects of the year awards, Professional advisor, Montgonery International, U.K., Consulting editor - American Biographic co., New York, Member of World Peace Mission of India (2001- till date).

Recently, Prof Shah Practice has been recognized by Architecture + Design Magazine March 2013, which entails life coverage of Prof Shah in the field of sustainable practice. He has also been facilitated with CBR Global Transport Engineering Lifetime Achievement Award 2014.

ECONOMICS THROUGH RESPONSIVE ARCHITECTURE & DESIGN

Technological Growth & Advancement has made the World a global village. The transfer of knowledge sharing through IT has become a very friendly tool and one can understand, visualize, implement & executive any of the innovative & high scale performance very easily through transfer of technology & by understanding of various elements of applied Architecture. Therefore, the role of an Architect & Planner in today's changed environment has become more challenging, proactively understanding the various Architecture & Engineering skills, innovative systems of Construction & Planning so as to achieve high standards of engineering practices.

The construction of a building in so called "Smart cities" is no longer a fancy of an individual (kings/emperors) but a visualization which needs to be responsive to the real user/ public and has to be cost effective, conserving resources & energy and should be embodied with the natural environment as well. The Economics of any of the projects through sensitive & responsive architecture would be a product resulting in respecting the mother Earth and the natural resources. Therefore, the planner needs to sensitize his thoughts, so that the building is not just be an energy guzzler but should be economically viable featuring all sustainable aspects of passive strategies in respect to solar movement, wind direction, topography of land, etc.

Prof. Charanjit Shah shares his experience of more than four decades in terms of finding solutions which are cost effective, sustainable and respecting the environment and have always advocated in the practice which believes that a build form should not be treated as a mass of brick and concrete, but a living organism which breathes and is embodied with the natural environment.

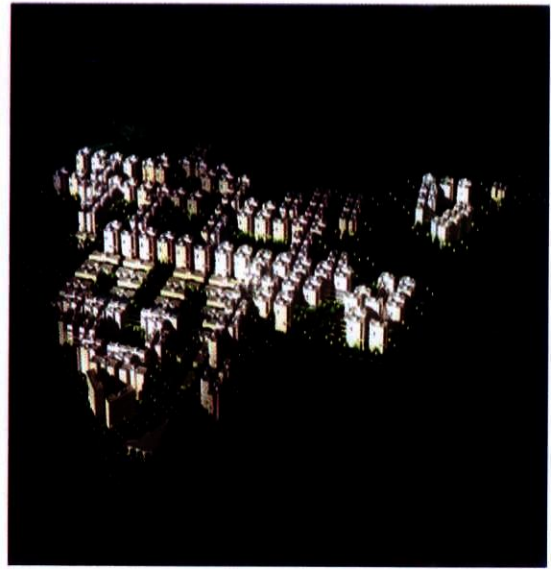
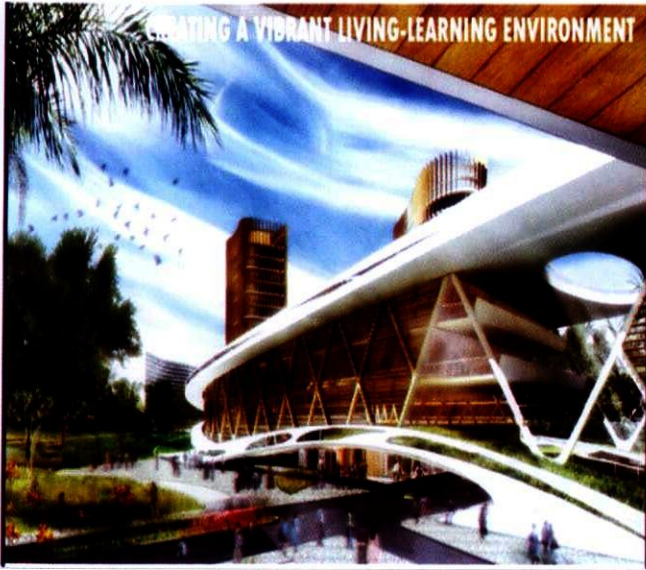


THE AVIAN-RAIPUR AIRPORT

One of the examples of sustainable and economically viable project is a living laboratory which would otherwise be an energy guzzler i.e.; **new Raipur Terminal building** with a built up area of 20,900 sq.m and project cost of 150 crores is an iconic, symbolic & global representation of the innovative ways of using steel keeping in mind that Chhattisgarh is the largest steel producing state in India. The integrated terminal is an elegant modern steel structure defined by a high-tech aerodynamic building offering a smooth transition to its passengers from the flight to the city. Its organic form deriving its genesis from an "Avian" and feathers of the bird is conceived with a sliced dome at the centre and multiple wings elevating the roof profile towards the sky. The internal planning of the terminal too has resulted into an efficient organization of passenger circulation and security enhances the vibrancy of the spaces. Various active and passive green measures have been implemented, making use of the best available resources. Achieving 43% reduction in water consumption, the terminal building complies with the ECBC (Energy Conservation Building Codes) for attaining the energy savings of 61%. It has been awarded as the Best Airport of India by National Tourism, Government of India.

HOMESTEAD CITY, Sohna, Gurgaon- GREEN LOOPS MILLENIUM ISLAND

Taking lead from this, with a site area of 138 acres we move to a sustainable and cost effective housing project for **Homestead** in Gurgaon. *As the population is increasing, the demand of good houses is growing.* Homestead City is a sustainable development integrating homes with the best of living standards. The town livens up from amongst the thick green cover that connects each plot/house/villa/Dwelling units thus enriching citizens' lives with double heighted sunken greens alongwith communal spaces & club. It is a high-rise vertical green city with local color that celebrates and champions the Best of Global Practices amalgamating with the Traditional Indian culture and sensibilities.



DAYANAND SAGAR UNIVERSITY, Bangalore- CELEBRATION OF SPACE WITH GREEN EXPOSITION

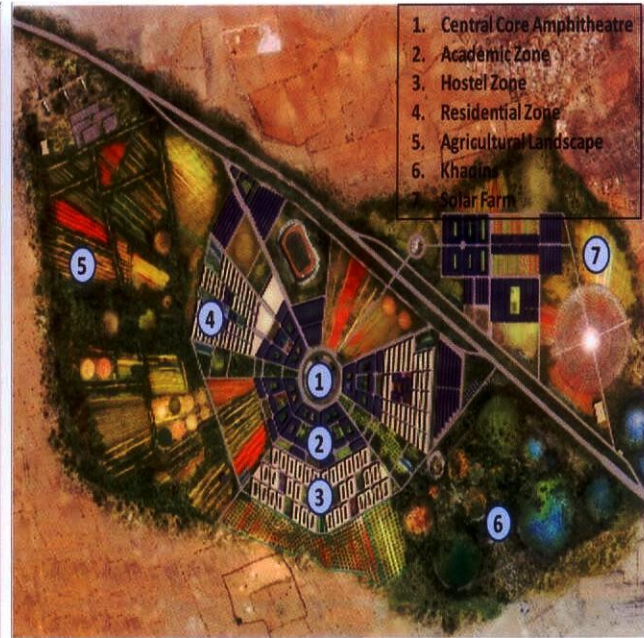
Dayanand Sagar University in Bangalore with the site area of 103 acres and project cost of 850 crores is the celebration of space with green exposition. Regenerating the natural landscape to support a vibrant "living-learning" environment, for students it will be transformative and innovative. The campus is a model fostering human potential in a setting that is unique and ecologically sustainable. Our design is based on an understanding of the functional program requirements and the behavioral patterns of the students and campus life. The campus is zoned into several districts, accessed from a central campus boulevard and a loop road. The Phase 1 Academic District is designed for seamless expansion as future development occurs. The Medical District is layered into three zones for flexible development. These include Ambulatory Care, Medical Research and Teaching. Residential hostels, faculty housing and recreation are located adjacent to the main greenway and is within a 5-minute walk from the Library, which is located at the center of campus.

The new campus is woven from a gradient of landscape and built forms that are generated from the natural topography of the site. These forms are "strands" that weave together to create an open fabric of spaces and buildings to house academic and other programs. Where ever the strands cross, it creates opportunities to locate special spaces(nodes)/programs associated with student life.

TIMES SQUARE, Naya Raipur- INTEGRATING MODERN DESIGN WITH TRADITIONAL CONCEPTS

Avinash Times Square Shopping Mall, with a site area of 2 acres and project cost of 35 crores emparts an entire new definition to architecture by using natural air and avoiding the use of artificial cooling systems. The commercial built-form has a dynamic complex so that the building facade

changes at every viewing angle. The helical form of the building emerges from the ground floor, as if originating from the surrounding landscape. The design creates open spaces and terraces with the view of providing maximum commercial viability. Wind tunnels are created in the central courtyard for the flow of air and the kiosks are placed around the courtyard for the ease of consumers. The highest point of the building is at the South-West which protects the building from harsh summer sun. Hoardings solve purpose of acting as a second sun screen apart from being a decorative element in the building; embbed in the niches of metal jaalis.



ENERGY OASIS- IIT, Jodhpur

With the site area of 850 acres, the design of the **IIT, Jodhpur** campus was conceptualized to establish an international brand and reinforce IIT's reputation as a world education leader with the cost of 3660 crores. The Campus Master Plan sets out to build a totally self-sufficient, green "oasis" and fountain of knowledge in the middle of Rajasthan's Thar Desert. The underlying planning principle of the master plan is a radiating geometry that springs from the central step well amphitheatre that grows in the form of concentric rings to accommodate the academic and residential centre all around it within radial roads. Careful attention has been paid to the principles of shading, orientation and as well as water flow. The plan is compact, dense and low rise. Buildings shade each other, shade pathways, streets and courtyards shade themselves with overhangs, louvers and jaalis. **The campus acts as a living laboratory so that the students can learn various practices of sustainability while walking and being part of the campus.**

JAMSHEDPUR 2057- TOWN WITHIN A PARK WITHIN A CITY

Then, with a site span of 64 sq. kms holding on to the idea that **Jamshedpur** is a small town at heart, We believe that the design wants to keep its community fabric— its short distances between work and home and community recreation —the basis of a quality of life and wants to have the resources of entertainment, shopping, education and culture. In the Town within the Park within the City model we believe we have found a way to converge these two ideals while also embracing the innovation of previous planning schemes with particular note and fondness of the F.C. Temple Plan, also known as Jamshedpur's "Garden City Plan" of the 1920s and 1930s.

TEXTILE VALLEY, ERODE- MIXED-USE INTEGRATED TEXTILE HUB

National Seminar on High Rise Development

Textile valley at Erode, Tamil Nadu with the project cost of 260 crores and built up area of 1,51,400 sq.m is a bold initiative to put up an integrated state of the art complex for marketing & purchasing of textile products. The design evolved from the dynamics of the site & the functional aspects of the program which demanded an axial planning & hierarchy in spaces within & outside the buildings. The geometry of the "Meenakshi" Temple is highlighted into the design and planning, resulting an interflow of series of open spaces into the built forms.

We look forward to create design innovations along with understanding of technology, latest material resources to create a build form which is BEYOND NET ZERO and Shapes Modern Architecture through Economical & Responsive Architecture.

-Prof. Charanjit Shah, founding Principal, Creative Group

