agri – [culture] CENTRE FOR AGRICULTURE RESEARCH AND COMMERCE

Samanyu Bhatnagar More Designs

More Designs

Sujay Sen Gupta

Chandigarh College of Architecture

URBAN AGRICULTURE

RIC

Abstract

Current era of experimentation forces the world to fight towards perfection and enhancement of sectors for better and larger yield. India has accolades in both secondary and tertiary sector. The frontrunners for our primary sector have set up various organizations that work in unison and move our research forward.

This collaborative work on Dry Land Agriculture will be carried out in Pune, India. As proposed, a research institute for development of Genetically Modified crops is to be constructed where profit trickles down to the farmer concerning better growing techniques and effective seeds. The programme of the research centre caters to subdivisions of the fields with a commercial centre where farmers can buy crops at subsidized rates. The motive is to promote equal urban agriculture.

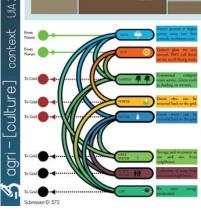
The design aims to make vulnerable yet iconic building but also flexible at the same time. At the laboratory blocks the floors need to be versatile, barrier free and pro amplification hence, exposed structure engulfs the slabs like a cassette and suspends it in the air. Upon entering the campus, curated demonstration blocks showcase the seasonal crops successfully researched upon. Combination of these makes our promenade, acting as the face of the institute. Extensive public transition will feature on this axis. Horizontal and vertical openness will foster communal equality. Highly public spaces made accessible, while relatively restricted areas inside float above, connecting it visually yet secure. The culmination of a commercial and a research institute will flourish and enable different societies to work together and advance.

> Agriculture is the main source of livelihood for over 80% of the rural poor in India. Although, it **employs about 52% of the labour force**, it contributes to **only 14.4%** of GDP and 10.23% of all exports.

The cradle of the success, besides government policies and high receptivity of the farming community, has been the **cstablishment of institutions of higher agricultural education**. These institutions developed new breed of skilled human resource who were instrumental in no only generating new technologies but also in their assessment, refinement and dissemination to the farming community. Agricultural human resource development is a continuous process being undertaken though partnership and efforts or the componens of the Indlan Council of Agricultural Research (ICAR) Agricultural Universities (AUs) System.

As of now the pace and quality of technology generation and human capacity building in most of the ICAR Universities have slackened owing mainly to inadequate state funding, depicted faculty strength, *lack of modern infrastructure* for education and research.

The present situation demands a renewed thrust for enhanced quality and relevance of higher agricultural education so as to facilitate and undertake human capacity building for developing self-motivated professionals and entrepreneurs in view the changing scenario of globalization of education.



PASSIVE SUBURBIA

A study of various technology indicates their parameters and outputs, the finding also indicate that the water of one type of energy production maybe the fuel of another. This understanding allows a circuit of energy ring to be formulated Salar energy and rain collection to contribute to the growth of garden and grey-water, however compost, grey/black water can be recycled to water gardens, fluth inolites, etc.

The key concept in **Passive Suburbia** is the efficiency increase as participation grows. This idea is also employed in conceptualizing the energy dargaran, we can extract waste from our neighbours and reprocess them to be distributed back into the grid. For example, the gryfblack water and green compost of the entire neighbourhood. The collection of them could fuel the Combined Heat and Power Systems to supplement a considerable portion of our energy use and simultaneously provide cooling/heating to the building.

"The more we build, the more we get."

If an operable system is chosen, the adjustable leaverea will track the paritien of the sun increasing the systems shading effectiveness and further reducing glar. During any important experiment wherein the lab has so avoid light under all circumstances, the operable loavers can be closed to omit the natural daylight into the building. The staff series on the glan by follow and generation completentisty in gover a

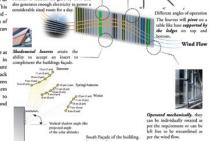
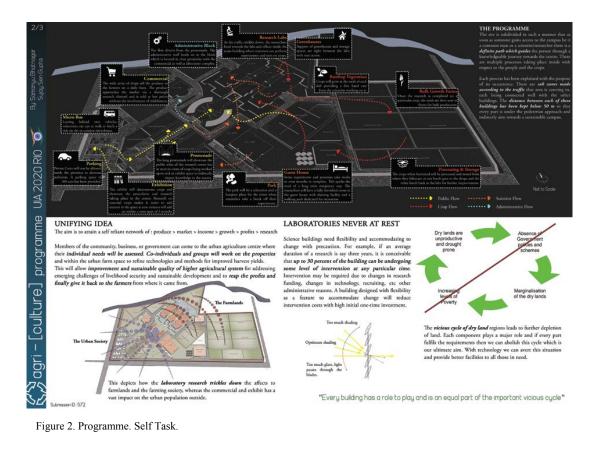


Figure 1. Context. Self Task.



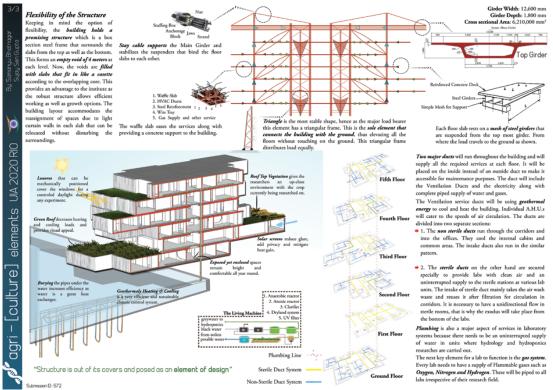


Figure 3. Elements. Self Task.