

## ARCHITECTURE AND INTEGRAL PROJECTS FOR HUMAN SETTLEMENTS WITH LIMITED MEANS

PROJECT. SANTAEMILIA
WHERE. FINCA SANTAEMILIA, MATAGALPA, NICARAGUA
WHEN. JULY '05 / SEPTEMBER '08

SPONSOR. STATESTREET COFFEE NICARAGUA ARCHITECT. JORDI GALOPA I VILARET BENEFICIARIES. COFFEE PICKERS' FAMILIES

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## PROJECT DESCRIPTION

In an innovative business environment, ABCDEstudio was assigned to develop a project to essentially solve problems and challenges derived from the coffee plantations in Matagalpa, Nicaragua. The innovation in this project and the "technology" implemented in a collaboration framework between North and South and vice-versa aimed to approach the project from a Social, Environmental, and Economic scope as well as a global understanding of the Low Income Human Settlements concept, all of which leads us to an innovative solution: Self-sufficiency.

## PREMISES FOR THE PROJECT SELF-SUFFICIENCY PROCESS

INTEGRAL PROJECT. A multidisciplinary and intercultural approach to the elements that might have a shocking role in the project is essential in order to minimize or fully avoid the effect of such roles. Under such premisses an integral project is designed. Such project is the result of a thorough study of the environment (utterly respected and unharmed), of its society, architecture, facilities, equipment and energy resources.

CLIMATE DESIGN. It is essential to study the location environment accurately in order to maximize the natural and bio-climatic resources in the area. Such study will allow the beneficiaries to have access to a better lifestyle. Elements such as orientation, location, cross ventilation, thermal inertia, relative humidity of the materials and construction, natural lighting and the treatment of grey and black (bio anaerobic digesters) waters will help us understand the possibilities and limitations the project will have to deal with.

INTEGRATION INTO THE LANDSCAPE. Putting to work together ancient techniques and current knowledge with local materials can solve important climatic issues in the area. These materials can be replaced quickly in case of damage and they blend in the landscape perfectly for the landscape and the biosystem is their actual source.

It is also a fact that the durability of these materials is usually shorter than others but not only they blend in the landscape providing beauty and harmony, these materials also require an environmental management, being part of the Grow Your Own House idea, than can create a positive and perennial bond between the settlement and its inhabitants.

SELF-CONSTRUCTION. We understand self-construction as the process of creating infrastructures, equipment and housing without skilled labor. It allows members of a community to participate actively in the uprising of their resources and infrastructures diversifying means to cover their necessities and settling the essentials for a potential micro-economy as all the necessary elements for it are to be found in the surrounding areas.

It's also very important to apply new technologies and innovation to the process in order to eradicate precarious construction sites and methods led without any kind of design, management or knowledge.



