



POLITECNICO
DI TORINO

Honors thesis

COURSE OF ARCHITETTURA PER IL PROGETTO SOSTENIBILE

The social interest housing has always been a delicate and important subject in Colombia, according to the national government (artículo 91 de la ley 388 de 1997); the social interest houses are those developed to guarantee the right of having a house to the families with the lowest income. In every Development National Plan (Plan Nacional de Desarrollo) the national government will establish the type and peak price of the houses for the families.

Bolivar is one of Colombia's regions with more government's help. This region mostly warm and humid is periodically affected by floods. Mompox represents the cultural confluence between the Spanish and the indigenous tribes, working as a catalyst for the region. Water bodies in Mompox are the 32.1% of the municipality's surface, the periodically affected areas by floods are the 38.5%, this is equivalent to 24.662 ha. The last flooding by "La niña" phenomenon in 2011 affected the 29% of the municipality's surfaces, about 18.888 ha. More than the 60 % of the population was affected.

The sustainability subject plays also an important role. There are different approaches and definitions about the relationship between architecture, sustainability, development and environment. To understand where we are now we have to go back and look for definitions, concepts and approaches that have been written since us, as global population began to worry about the environment and our relationship with it. The sustainability concept regards the construction in every aspect: design, construction, use, management and disposal; and in every scale: materials, building, community, city, territory and planet. Otherwise are inherent the "living" aspects: psychological well-being, production, work, mobility, etc.

We can rely on many aspects to explain the demand of social interest housing in Colombia, from the more than fifty years civil war leading to forced displacement, to corruption, poverty, poor economy models and so on. However, in this thesis what is conceived as the problem is the current way the social houses are built, their design from the architecture to the urbanism, not taking into account important issues such as environmental, social and economics, making them minor aspects.

The only thing that actually matters apparently is just to give a house to the people and finish the work there. We cannot undervalue the work of the government with the National planning Department (Departamento Nacional de Planeacion) and the private associates that are developing these houses, but we can do better, with better professionals and with and interdisciplinary teams that, from a holistic approach they can create a sustainable social interest housing.

However, not everything is lost. There are entities (public and private) concerned about the future of the country, its communities and its sustainable development, and more important, they are committed to generate community. Also students, professionals, thinkers, from every field of action, young people that are able to think and to dream a better tomorrow.

The project's aim is to regenerate the community, by re-locating the new inhabitants, understanding the natural cycles and to live with them, taking advantage in the best way possible, of resources according to the needs generated in every season. With this, words like sense of ownership and identity come into context. Using low-tech techniques that have been used since the indigenous tribes settled in the region.

Vernacular architecture in these particular regions of Colombia stands for native techniques, born in the place and developed by its people through hundreds of years, failing and succeeding, experimenting, always in harmony with nature. We have also the colonial architecture, techniques brought and adapted to the place and its climate.

The use of raw earth and materials such as good, straw, and clay is nothing new, is not something "alternative". We have always used it and now is the time to appreciate what a precious heritage our ancestor have given us. Bringing together the indigenous architectural heritage and the knowledge of the XXI century, we can re-think how the cities like Mompox could work in the future, and not necessarily made entirely of concrete and steel.

Sustainable social housing, natural cycles and climate change in the city of Mompox: The sustainable house as an example of resilience alongside nature

Tutor
Riccardo Pollo

by
Santiago Llano Posada

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E-mail: architecture.slp@gmail.com

For further information please contact:
Santiago Llano Posada. architecture.slp@gmail.com