

# Peace is built through dignified urban spaces (second part)

The house that gives us the earth and intelligence of living



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One man cannot  
build a house, but ten men  
can build ten houses  
very easily.  
*Hasan Fathy.*

According to Bereshit (Genesis), Adam (Adán) was the first man and he was made of red soil (adama), and from it he was nurtured and threshing floor were built to plant and livestock fence, housing for family and altars to thank; Adam, accompanied by Hava (Eva) woven fabrics to cover their bodies and their descendants, by the line of Tubal Cain, they melted metals and produced musical instruments.

Since the beginning of time land gives everything, from the grain of wheat to essential raw materials to the most sophisticated computer. Without the things that the earth offers, we all would disappear, including





The houses made of soil makes possible community participation.

animals, plants and stones. Thus, the earth, as Carl Sagan said, is our little home, which we all collect and use everything, in which we are born and we die and also we built our house, that world within our reach where we are culture and gathering, the dreams we forge and the accomplishments we get. Without that home without their sites and security, yet we would be frightened animals.

The word to domesticate is defined as to do something from outside of the house proper of the place. So we tame territories, rivers, animals, plants and natural phenomena such as energy. But the great domestication of the land was to get their content in smoke, clay and sand became home. And, in the moment we stand on the ground floor of the house, they were the civilization and the first aesthetic manifestations of intelligence. To create a rational use of natural resources and understand the meaning (for good use) of raw materials, it led to understand this element as the giver of life and possibilities.



The soil and the modular concrete houses are two housing solutions from the PBU stamp.

## The PBU earthen houses

Firmitas, utilitas and venustas are concepts of Marcus Vitruvius Pollio, the great architect of Octavian times (known as Caesar Augustus). This means that to build a house it requires a thoroughly studied project; a well prepared budget that allows for either what is thought and beauty of a result from the project, because it is to live in conditions of Wellness. And in this case, the proposal is to dwell in houses made with earth

In Colombia, rural housing deficit is very high. And while there was a centuries-old tradition of building with soil, contempt for that technique (ancient in the world) led to proper procedures are forgotten and badly implemented, mixing with inadequate materials that produce fragile, inappropriate and expensive housing, non-proper to the culture and harmful to the landscape and the environment.



Soil has been used throughout history to construct.



**The architects  
Saldarriaga Molina,  
Bernal Henao and Restrepo  
Montoya had made  
housing their  
object of study.**

Based on the above, the architects Beatriz Elena Saldarriaga Molina and Felipe Bernal Henao, research professors of the Faculty of Architecture of the PBU and members of the laboratory of Architecture and Urbanism (LAUR) and the Group of Technical Studies and Experimentation (LEET) They conducted a research on the new possibilities of construction land in Colombia, with the implementation of the results of their study at several sites in Antioquia to show the feasibility of this type of construction in a country of rural vocation.

The earth house proposal, born not only by the viability of the materials but according to the region ethnography, production systems and cultural forms of belief and social relationship is a house that is built in the first instance, with compressed earth blocks (BTC), easy to make dry and apply as a building material. A cool, airy spaces and the necessary house and manages to lead a dignified life. These homes, which respect the environment and integrated beautiful to the landscape, they honor the tradition of country living, support a second variable and is to mix (if necessary) adobe or clay soil with sand, especially in regions do not allow a good BTC. All this, supported cheap industrial structures previously constructed, which allows the community to set up the house faster.





The houses prototypes have been constructed in Marinilla's PBU headquarters.



Project leader: Felipe Bernal Henao.

To implement this model, cheaper and better than what exists, the PBU designed a textbook and, at the same time, held a series of training (courses and workshops) with people in the regions in which the model is launched for themselves, as a group, they built the house and saw for themselves the advantages of this type of construction: wider housing (more area up to 70 m<sup>2</sup>), low-cost, positive impact on the environment, the disappearance of carbon footprint and optimal indoor climate advantages as more rational use of space and better ventilation.

With this project, the PBU responds to the premise that to reconstruct and rebuild societies, social, cultural, environmental and economic issues, starting with housing. And from this, they show the fundamental principles of sustainability. And in the case of housing land proposal that not only meets but has a plus: the creation of affections to the land and between people, in addition to creating workforce for teamwork, group satisfaction and re-learn a trade.

If we would define the two proposals of soil houses of the PBU, 14 words would be the complete definition: it is the most noble to the life of the people and the land.

Scan  
the QR code  
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the video.



### Technical sheet

**Project name:** Low costs housing solutions.  
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