

POLITECNICO DI TORINO
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**Appropriate and appropriable technologies for self-building with raw earth
Interventions in developing countries: some cases studies**

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The thesis was born from an internship at a non-profit association that deals with design and self-building in developing countries. Its main topics are housing problems and technology in developing countries, and its aim is to conduct studies on these problems and to look for alternative solutions to solve them in the simplest and most economical way. The solution of raw ground, more specifically the use of *Blocco Mattone*, BTC particular block with grooves and ridges, is analyzed and used in two different case studies, the first one for a house in Senegal and the second for a battery of latrines in Guinea.

The case study in Senegal, deals with the design of a building for residential use, whose rectangular and simple shapes are designed to be easily built by the local population. The main materials adopted are: reinforced concrete (solely used for the foundations, which are carefully designed and fitted to safeguard the economy of the intervention), the *Blocco Mattone* for weaving walls and a corrugated metal sheet as a cover.

The second case study in Guinea, takes shape from a careful study of the sanitary problem in developing countries and suggests a solution of latrine for the village community in question.

INDEX

Introduction

1. Self-building in developing countries
 - 1.1 Cooperation
2. Raw ground as construction material
 - 2.1 The choice of the ground
 - 2.2 Field tests
 - 2.3 Laboratory tests
3. Construction system with raw ground
 - 3.1 The wall and its different constructions technologies
 - Adobe
 - Pisè
 - Bauge
 - Torchis
 - Grounds lightened
 - 3.1.1 Constructions typologies in South-America and Africa

- 3.1.2 The earth compressed block (BTC)
 - Preparation of the mixture
 - Presses in use
 - The production of BTC
 - Process of *curing*
 - Laying of the BTC
- 3.1.3 The *Blocco Mattone* and its applications
- 3.2 The foundation works for le walls wee portanti
 - 3.2.1 Common typologies in South-America and in Africa
 - 3.2.2 Common solution adopted in developing countries
- 4. Case study of Abbè Etienne, in Senegal
 - 4.1 Senegal
 - 4.2 Housing issue
 - 4.3 Suggestion for Kaolack, Senegal
 - 4.3.1 Foundation fitting
- 5. Case study of latrines in Lèlah, Republic of Guinea
 - 5.1 Republic of Guinea
 - 5.2 The issue of latrines in developing countries
 - 5.3 Present and past types of latrines
 - 5.4 Suggestion for Lèlah, Republic of Guinea

Final impressions

Bibliography

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