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SUSTAINABILITY DESIGN

Abstract

**Renovation design and construction of small stone
buildings in Alta Langa**

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by

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“Renovation design and construction of small stone buildings in Alta Langa” is a project carried out in collaboration with the Association Parco Culturale Alta Langa. As shown by the title, we had the opportunity to take part in the entire process of renovation and functional recovery of a *ciabòt*, the “Lumassìn”, located in Castelletto Uzzone. The *ciabòt* is a small building serving agriculture purposes, typical for the vernacular architecture of Alta Langa. The construction took place during six training workshops organized within the Banca del Fare Summer School, under the guidance of expert craftsmen and with the help of volunteers from all over the world. Apart from the active participation in the summer workshops, the work done in collaboration with the association also involved a preliminary research phase on the territory and on the local architecture that was concluded by the renovation design and the assistance in drawing up the documentation required for obtaining the construction permit.

The main volume of the thesis is therefore divided into three parts: a first one regarding the territorial context and the large scale project, a second one dedicated to the Lumassìn from the preliminary investigations to the completion of the project (including the final project design and the sizing of off-grid systems - solar and PV panels, a greywater collection and treatment system, a compost toilet and a rainwater harvesting system) and a third part that describes the preliminary design of another *ciabòt*.

Two annexes are added to the main volume: “The Lumassìn notebooks Vol. I” and “The Lumassìn notebooks Vol. II”. These are technical manuals reporting the intervention and the self-construction methods carried out and planned for the renovation of the building. Both describe the construction activities in regard to the material mainly used in the construction: stone, wood and mortar. The activities carried out during the workshops are described in the first volume, while the second one includes previsions and instructions for some of the main remaining operations necessary to be carried out in the future for the completion of the renovation.



Redina Mazelli, *The Lumassìn before the intervention*, April 2018



Alessandra Renzulli, *The construction site*, August 2018



Redina Mazelli, *The Lumassin after the renovation intervention of summer 2018*, September 2018

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