

POLITECNICO DI TORINO
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Honors theses

Tropical architecture: the Case of the Camillian Mission in Jérémie, Haiti

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The inspiration for this thesis came from collaboration with the Camillian priests of Turin who have established a presence in many developing countries through their numerous missions.

Specifically, this study focuses on the repurposing of the branch in Jérémie, a small town in southern Haiti.

The project is approached covering different points of view, beginning with the difficult situation in which the country, considered one of the poorest in the world, finds itself at present. Past events, natural disasters, and the worst of health conditions have, in fact, kept the country from achieving its own social, political, and economic equilibrium.

All of the above strongly influenced the architecture which must face both cultural and material limits and maximize local capabilities.

This was fundamental to completing a research and analysis phase which was useful to approximate the situation in Haiti. These results can be found in the first few chapters of the thesis.

This study began with an in-depth look into the past and continued by focusing on climatic characteristics and the peculiarities of the native architecture, specifically that of the historic center of Jérémie.

Time spent on site allowed the opportunity to learn the realities of local construction and the materials, techniques, and technology used.



Types of buildings in the center of Jérémie

Based on the knowledge obtained and following some measurements taken of the existing buildings at the mission, the planning phase was completed.

The project calls for the demolition of some buildings deemed unsuitable, the renovation and repurposing of others, and the construction of two new structures that will house the seminary and the residence of the Camillian priests.



Project blueprint

1-Guest house; 2- Seminary;3- Conference Hall; 4- Terraced courtyard; 5- Church; 6- Common area; 7- Diocesan nun's residence; 8- Priests' residence

As there were potential problems due to technical, technological, and environmental factors, some project guidelines were established and can be summarized as follows:

- Contain construction and maintenance costs utilizing materials available locally and construction techniques that the Haitian builders know. Therefore, the technology used was studied to ensure it could be done in a simpler format by the local laborers in order to avoid importing other materials. In addition, thought was given to a system for the distribution of potable water with limited use of electricity and to a network for the collection of rain water that may be used for crop irrigation.

- Control of comfort indoors by way of passive technology pointed toward maximizing natural shade and ventilation of both the rooms and the building. To achieve this, there was extensive use of porticos, solar shadings, ventilated roof and foundations.
- Attention was given to stability characteristics with regard to cyclones and earthquakes thanks to the improvement of local construction techniques through efforts sufficient to satisfy the safety requirements.



Perspective views of the project.

Above: the seminary; bottom left: the priests' residence; bottom right: the courtyard

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