Mayotte Social Housing

Mayotte, Comoros Islands

Architect	CRATerre/Ecole d'Architecture de Grenoble Grenoble, France
Client	Société Immobilière de Mayotte, S.I.M. Mayotte, Comoros Islands
Completed	1982 ongoing
Costs	not available

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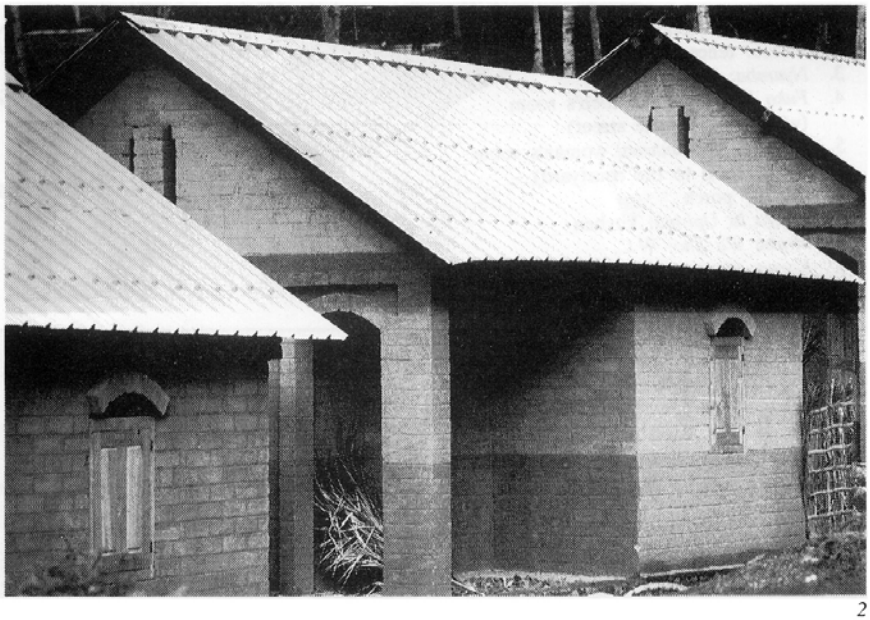

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The aim of the project was to improve housing conditions for the population of Mayotte. Traditional habitat consisted mainly of coastal villages, and individual dwellings comprise a large private court (*shanza*) used for daily household activities and a two-room hut (*nyumba*) used for sleeping and receiving guests. Built of traditional vegetal materials these structures have a maximum life span of ten years. In response to the increasing demand for more permanent structures the French administration is financing and offering technical assistance through CRATerre to establish a new building technology using local materials.

Building type	*831*
1989 Award Cycle	732.COM

1. *Experimental housing*
2. *Basic model units*

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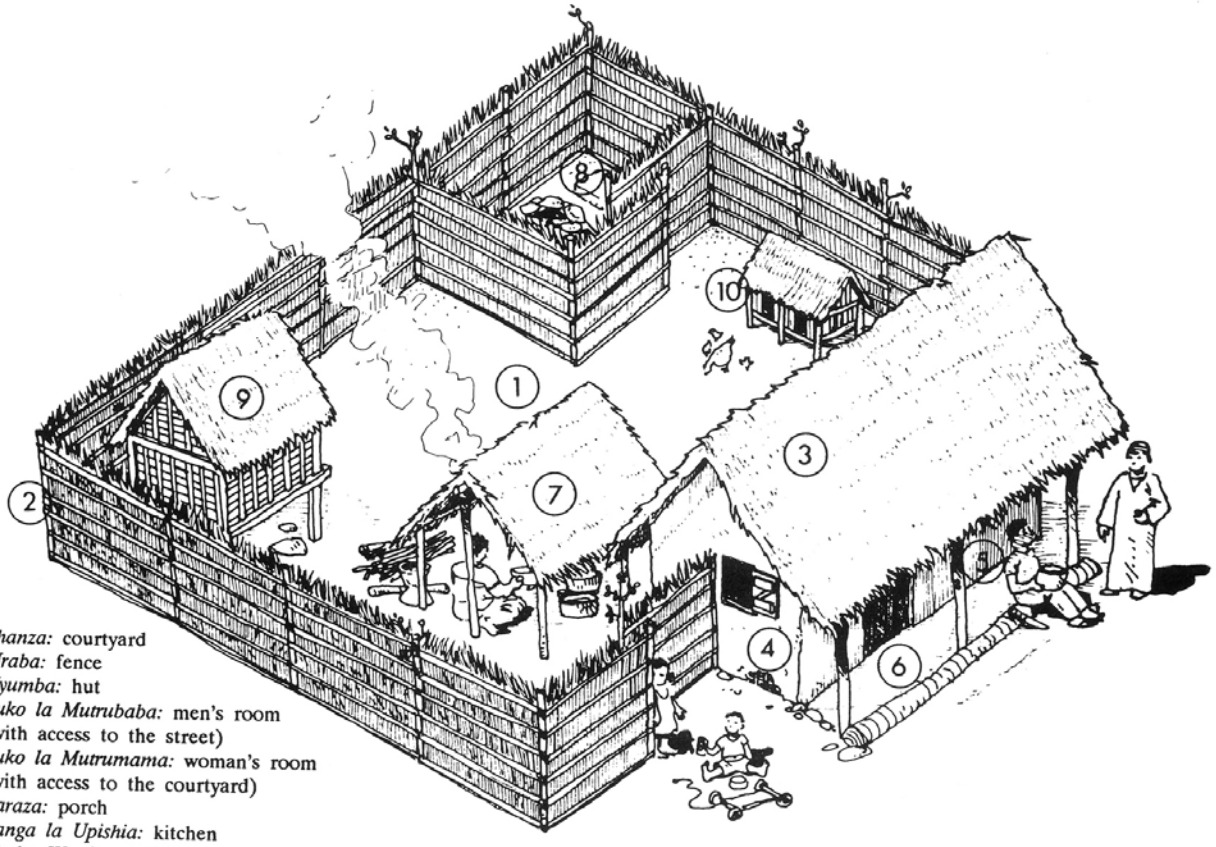

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Site

Mayotte is the northernmost of the four Comoros islands in the Indian Ocean between Madagascar and the East African coast. The population, estimated at 68,500 in 1985 is of Bantu (East African) origin and primarily Muslim as a result of the Arab colonisation in the 15th century. The project sites are located in different coastal areas of the island.

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3. *Axonometric view of a traditional individual dwelling*

4. *Vegetal materials are used in all the village constructions*

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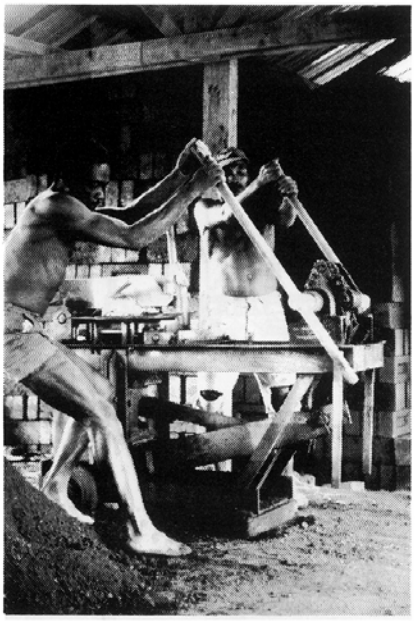

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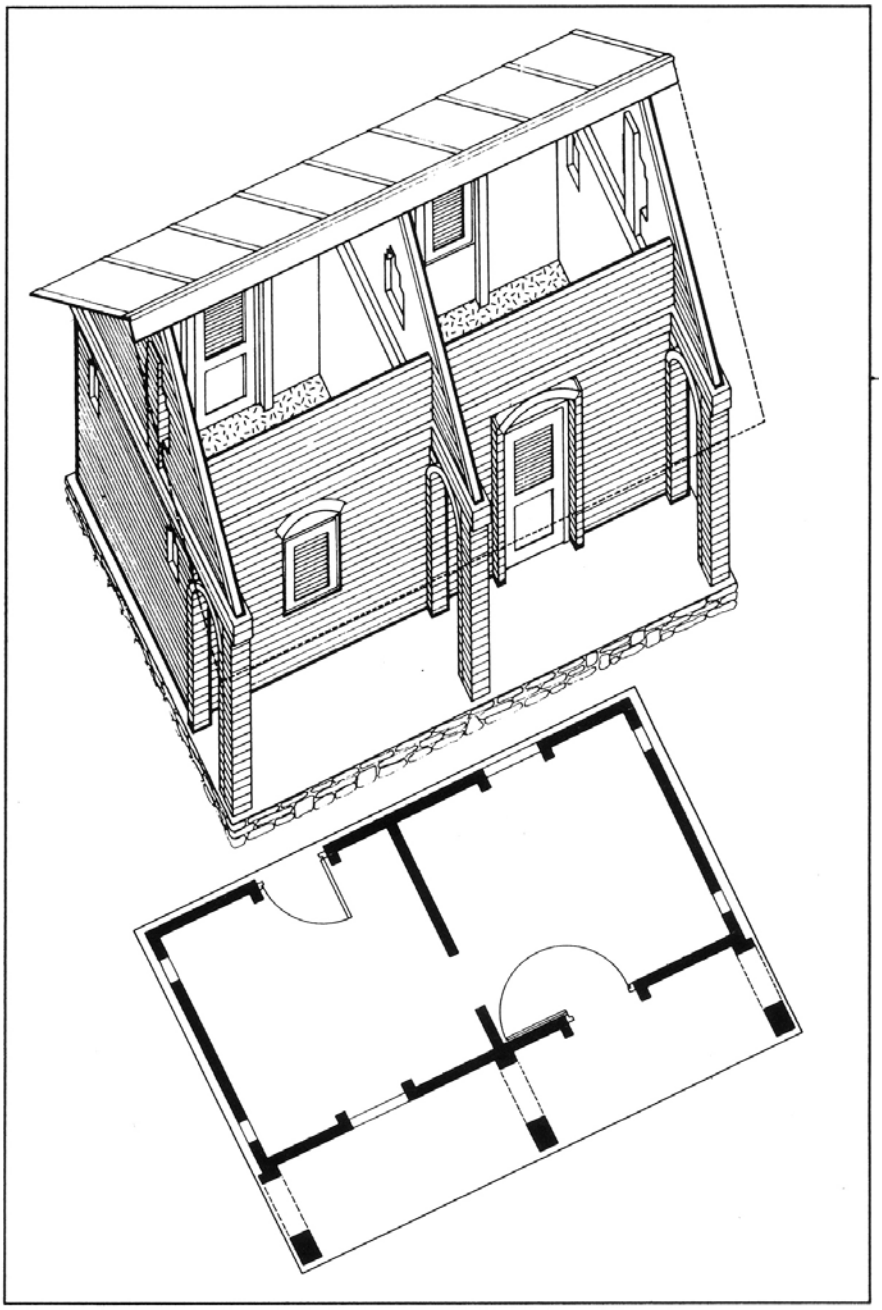

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Functional Requirements

The project includes the following completed buildings:

- 2,800 private dwellings;
- a cultural centre;
- schools;
- offices;
- shops;
- a bank;
- professional training centres.

Description

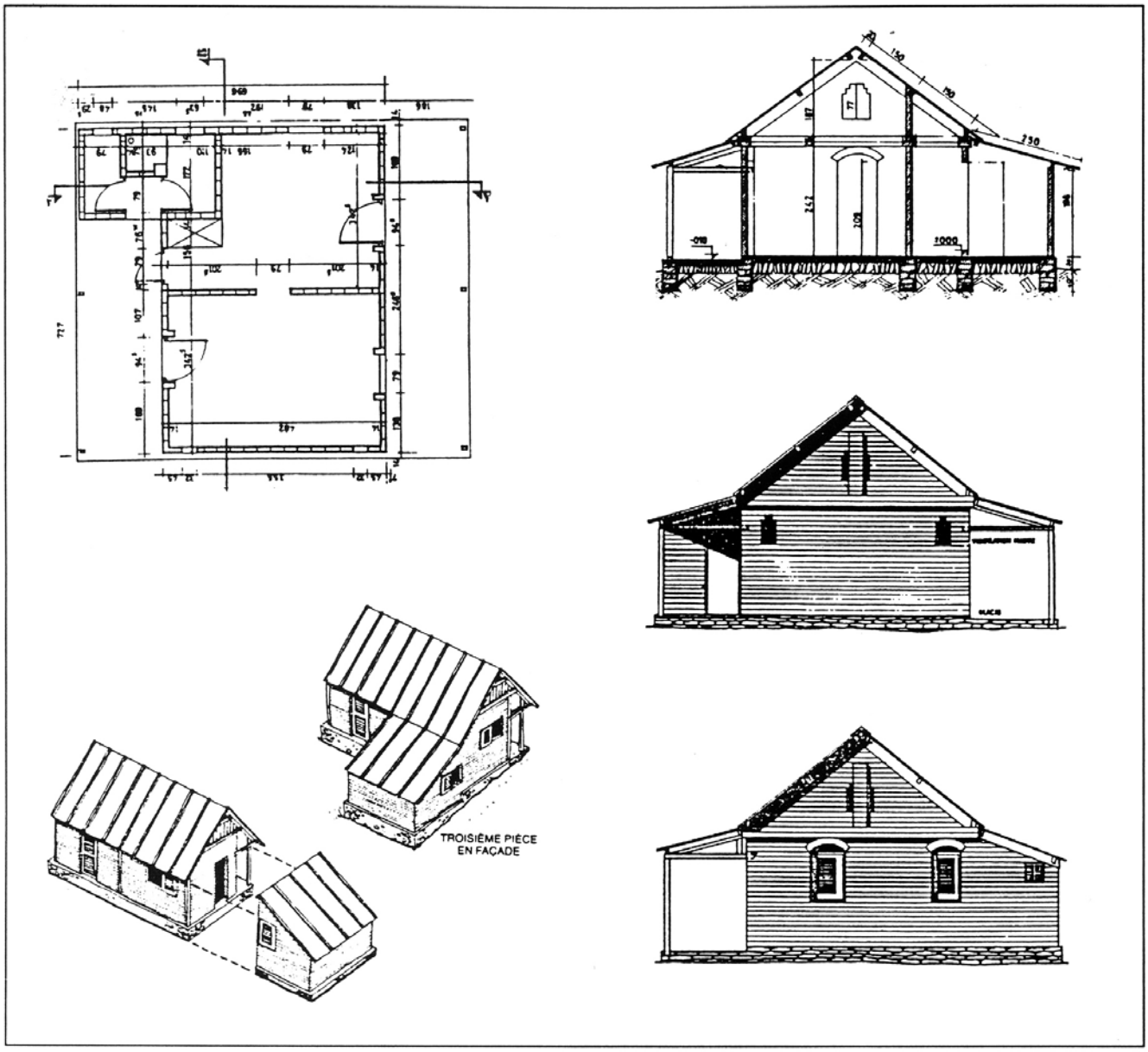
The project is part of a programme to build 15,000 units over a period of ten years. Following an extensive research on the suitability and availability of building materials a standard building system was developed consisting of bricks made from a mixture of volcanic ash and clay and produced with the aid of a simple manual press. The standard house type is a variation of the traditional *shanza-nyumba* dwellling.

The project was developed on a self-help basis, and financial assistance is offered directly in the form of building materials. The training of masons was given special attention and fifteen brick production centres were also established to ensure the availability and homogeneity of building materials.

Project Significance

The simple and new construction system introduced in the island, coupled with a satisfactory financing and self-help process has resulted in the creation of a large number of housing and public buildings in Mayotte. The introduction of brick workshops has created some job opportunities in the island.

5. *Brick production*
6. *Axonometric view of a basic unit*



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Construction

Local compressed cement-stabilised earth brick, load-bearing walls or timber frame and earth-brick infill, supported on reinforced concrete foundations and pitched roofs have been used. The brick walls are rendered and painted and the roofs are composed of painted corrugated metal sheets or thatch from coconut trees.

Building type	*831*
1989 Award Cycle	732.COM

7. Updrading of a basic unit

I. IDENTIFICATION

Mayotte Social Housing

Mayotte Island

Date Completed : 1982, and ongoing

Architects : Grenoble University, the Research Centre for Earth Building (CRATERRE), France

Clients : Société Immobilière de Mayotte

Building Type I : (831) Housing : Multiple : Low-Income

Building Type II :

II. DESCRIPTION

Mayotte is the northernmost of the four Comoros Islands in the Indian Ocean. The population is of Bantu (East African) origin and primarily Muslim as a result of Arab colonization in the 15th century. The climate is tropical and the local agricultural economy is not highly developped.

Traditional habitats consist mainly of costal villages, and individual dwellings are formed by a large, strictly private court (shanza) used for daily household activities, and a two room shed (nyumba) overlooking the road and used for sleeping and receiving guests. Houses are built with a bamboo and timber frame, a mixture of mud and straw for infill, and coconut leaf roofing. Although well adapted to the climate, these structures have a maximum life span of 10 years, and there is increasing demand for more permanent structures. In response, a programme was initiated by the local French administration to offer financial assistance and to establish a building methodology that would at the same time ensure an economically viable production of building materials using local resources.

Following intensive research into the suitability and availability of materials and resources, a basic building system was developed and consisted of timber roofing members and a masonary wall structure using bricks made of a mixture of sandy volcanic ash and clay, stabilized with a small percentage of cement. Bricks are formed with the aide of a simple, manual press. The standard house type is a variation of the traditional shanza-nyumba organization.

The project is outlined on a self-help basis, and financial assistance is offered directly in the form of building materials. The training of masons is given particular importance, and this has also recieved some financial support. Fifteen brick production centres have been established at different locations to ensure the availability and homogeneity of building materials.

To date, the following have been realized: 2800 private dwellings; a cultural centre, schools, offices, shops, a bank, and professional training centres.

AREA and COSTS :

Site and Building Area **(in square metres):**

Site n.a. **Ground Floor** n.a. **Total Floor** n.a.

Costs : **not available**

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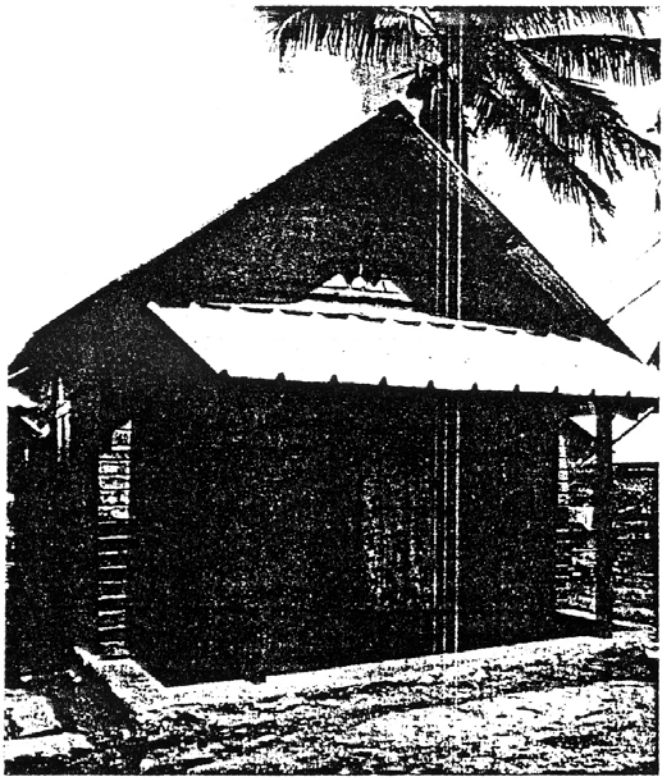

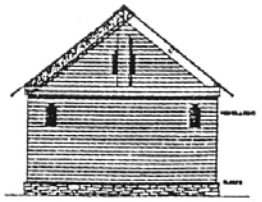

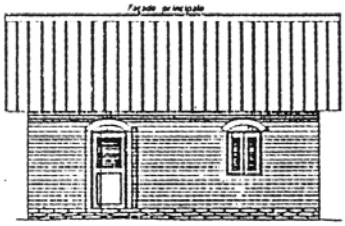

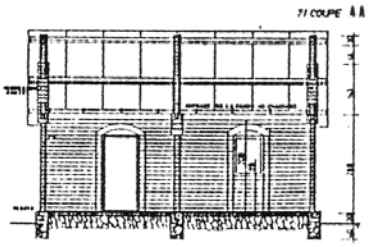

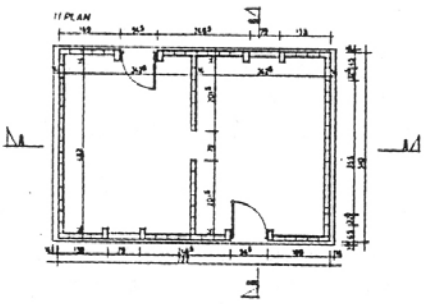

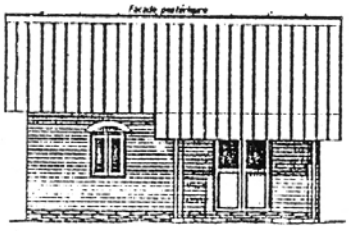

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