



ARCHITECTURE AND URBAN FARMING

A CASE STUDY OF KEY HOMES LOW COST HOUSING



Urban farming is the practice of growing or producing food in and around urban areas.

This can also involve animal husbandry, aquaculture, agroforestry, urban beekeeping, and horticulture.



Urban farming can support the well-being of individuals and communities in multiple ways: developing local food systems, contributing to food security, promoting economic development, strengthening social integration and improving urban biodiversity and environmental health.



- Health, Nutrition and Food Accessibility Benefits
- Education, Skill Building and Job Training Benefits
- Economic Benefits
- Environmental Benefits



ENVIRONMENTAL BENEFITS

Urban farming affords a variety of environmental benefits. The extent of these benefits depends on what type of urban farming is practiced and how it is managed. In many cities, urban farming supports biodiversity by providing crucial habitat for pollinators such as bees, bats, butterflies and birds. It also reduces storm water runoff and improves air quality.

URBAN FARMING AND ARCHITECTURE

“Gardening is unique in its universal appeal and its transformational power. Without plants and more planting, we are all in trouble! Although we are not traditional garden designers, we think we can demonstrate ways that anybody could make a small difference and broadcast not only the beauty but also the functional importance of horticulture through both traditional knowledge and the latest in growing innovation.”

-Tom Dixon



With rising global urban populations, existing food infrastructure systems are rapidly becoming unsustainable.

Architecture therefore provides the built accommodation for people, plants and animals, so that the 'urban future' can be reevaluated.

PROPOSED LOW-COST MASS HOUSING

KEYHOMES DEVELOPMENT NIGERIA LTD

ARCHITECTURAL ELEMENTS

The entire design, layout and context of the low-cost housing is inspired by the concept of sustainability. Materials to be used are natural elements and readily available building materials around the environment.



USE OF LOCALLY AVAILABLE MATERIALS (ADOBE BRICK, THATCH)

Locally available building materials shall be implored in the construction process.



COURTYARD

All housing units are designed to include courtyards with a green area.

PERFORATED BLOCKS

- All buildings are designed to have wall areas where
- perforated bricks are used to aid lighting and ventilation



Aims and Objectives of the project:

The Mass Housing Design is targeted at providing shelter to the average Nigerian in an Affordable and Sustainable manner.

Context:

The site is a 6.43ha expanse of land located in New Karu, with existing landforms, vegetation and bare soil. The choice of materials, colours and textures will be influenced by the site in order to ensure sustainability and reduce construction costs.

Design Styles & Materials:

The general layout and design of building structures comprises one major housing type with incorporated with auxiliary functions like Recreational spaces, Clinic, Police Post, Mini-Mart. etc

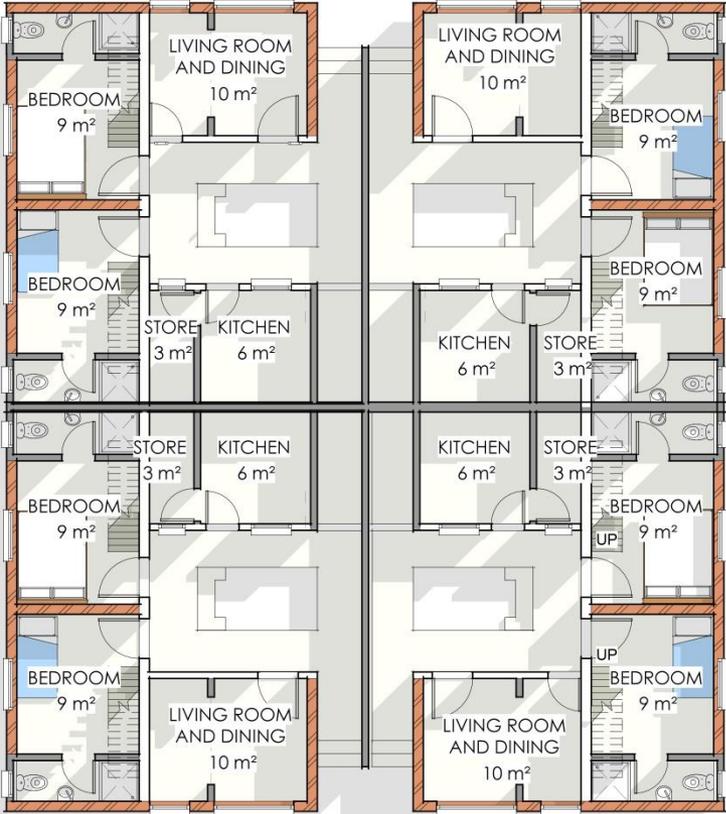
Designs will blend in with the natural surrounding and this will be achieved with the use of existing materials in-situ. These include Wood, Stone, Thatch and Bricks.



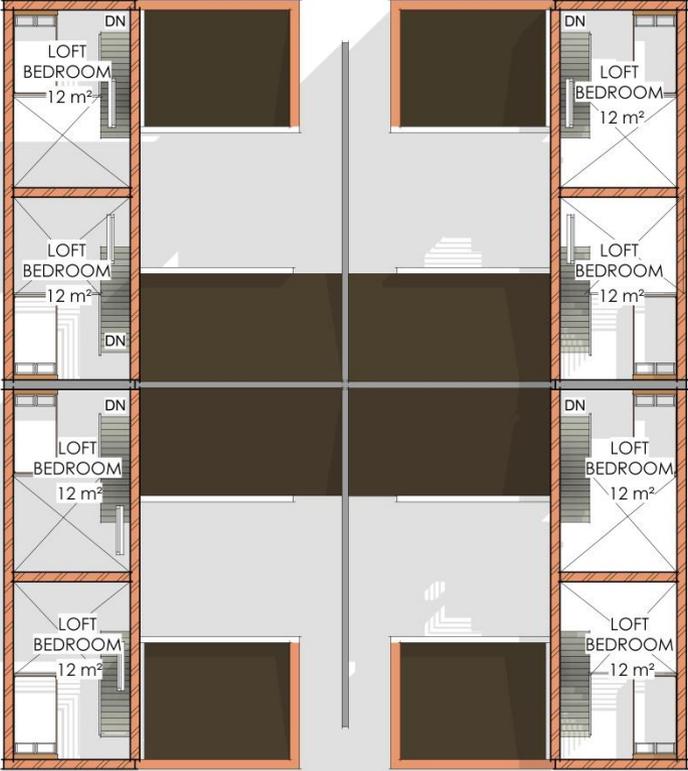
SITE LAYOUT



FLOOR PLANS



GROUND FLOOR PLAN



MEZZANINE FLOOR PLAN

3DS



THANK YOU