

Is it just the Four walls and a roof? *From Technical to Soft Cultural Issues*

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Elements and processes in housing design/construction to reduce emissions and cost
Background

Housing policy in Uganda can be broken down into three phases, pre-colonial, colonial and post-colonial

Pre-colonial

With exception of the “Kibuga,” there were no notable urban areas and housing was the responsibility of individual households.

Housing was the responsibility of the individual household

Colonial

1893, Uganda was declared a protectorate

In 1903 the Uganda ordinance was passed that gave the Governor the powers to define the boundary of Kampala

1912 by Kampala’s first plan, intended to control and direct development. , gave priority to upper and middle-class white and/or Asian populations and was focused on Nakasero and old Kampala (UN-Habitat, 2007.)

Ernst May’s plan in 1930 was the first comprehensive plan that included settlements for middle and low-income housing for Asian and African populations

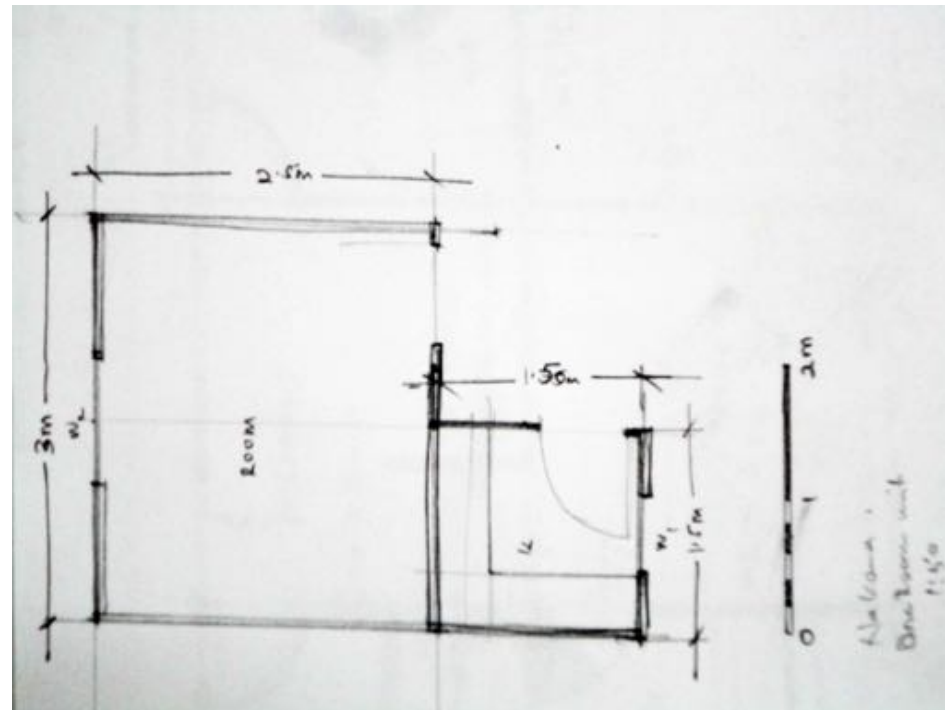
In 1951 a Planning Act was passed, it was aimed at stimulating orderly and progressive development of towns



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- Housing in Naguru and Nakawa by Earnst May



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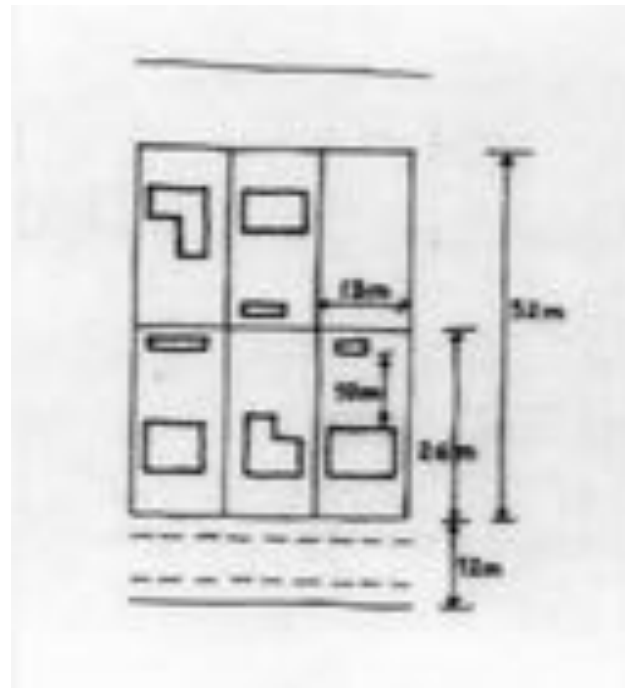
Post Colonial

1972 - The Kampala Development Plan was envisaged as a guide for the development of a pleasant and healthy city for all. The plan was never adequately enforced due to the political strife that engulfed the nation.

The low-density types

Medium density type

High density type



Kampala Development Plan (1972)



Nnagenda-Musana Vestbro (2003)

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1992, government adopted the National Shelter Strategy (NSS) founded on the enabling approach where government as a facilitator would create an environment in which different players: households, private firms, NGOs, and both formal and informal community groups could operate to provide decent shelter.

The enabling approach allowed government to disassociate itself from the high cost of housing provision, while at the same time providing the regulatory framework and support infrastructure to ensure organised development.

1998 land act, condominium act, and promotion of housing finance supported the NSS (Department of Human settlements, 2008)

In 2005, the NSS was reviewed and a draft National Housing Policy was prepared. Its major attributes include slum upgrading, enforcement of standards to prevent overcrowding, and improvement of living conditions for the urban poor.



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What is low income housing?



Housing income ratio is often used to measure what would be perceived as low income housing (social housing) where if a household spends more than 30% of income then it qualifies as a low income household

- Literature on low-income housing in the developed world is predominantly concerned with improvement of social housing schemes and methodologies to reduce mortgage burden on households.

(Low income) housing is synonymous with informal housing: slums, squatter settlements, marginal settlements, spontaneous settlements, transitional settlements, unplanned rural clusters, and other settlement typologies that exist without proper planning permission and outside of the formal construction sector.

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What is Low Income



What we think



The reality

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What is Low Income

The reality of material use in housing has to do with aspirational factors of households - everyone wants to be "better"



The illusion - Rural

Uganda population

Urban 23.5%

Material use

Steel sheets 67.6%



The reality, evidenced future - Rural

Rural 76.5%

Brick 57%

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A worthwhile note

Housing is difficult to operationalise because satisfaction with ones housing is a complex mixture of factors that include age, marital status, family size, social economic status, education, employment, neighbourhood, social participation, length of residency and the house itself.

The house (physical dwelling) is only one link, in a addition to societal environmental systems.

associated with the physical characteristics of the dwelling

- The location
- The aspirations of the resident (desired vs current situation)
- the physical characteristics of the residence

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Brick is accessible, brick is a wonderful material, what is the challenge?

What does embodied energy have to do with me?

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Comparing alternatives: Soft issues affecting technical choices



Existing alternatives + shortfalls

ISSBs introduced in Uganda in early 90's

Challenges

- Perceived quality

Urban vs rural dichotomy

- Perceived cost

Partial versus total cost



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Measuring impacts



Measured amount of wood used in brick burning to determine embodied energy of a brick

Identified amount and sources of fuel wood

- Average of 9 tonnes of wood for 15000 bricks
- A lot of the wood is sourced from old growth forests
- The wood is wet in nature



Embodied energy of country brick at the source in Uganda - 6.4Mj
4 mango trees

Soft Cultural Issues

How/Where people...

Live?	<i>Day (Absentee) Tenant Extended Family Time away</i>
Work?	<i>Walking Distance Commuting Estate</i>
Relate?	<i>Neighbour Guest Gendered Territory Family</i>
Consume?	<i>Food Appliances Amenities Utilities</i>
Think?	<i>....?</i>