

Habitat for Humanity Kenya 40th Anniversary Celebrations (2022)

40@40

(40 houses for 40 families)

Habitat for Humanity Kenya (HFH Kenya) is a national non-profit organization that began its operations in 1982 as an affiliate of Habitat for Humanity International. The affiliation is guided by a National Affiliation Agreement (NAA) and a Memorandum of Understanding (MOU). Habitat for Humanity Kenya's overall vision is: "A nation where every family has a decent place to live." Its mission is: "Seeking to put God's love into action, Habitat for Humanity Kenya brings people together to build homes, communities and hope". Its overarching goal is: "Enabling low-income families access to decent and affordable shelter". In 2022, Habitat for Humanity will be marking 40 years of bringing people together to build homes, communities and hope in Kenya. We are planning to commemorate this 40-year milestone by inviting individuals, corporates, institutions and governments *to build 40 homes for 40 poor and vulnerable families in Laikipia, Machakos and Homabay Counties.*

DESIGN COMPETITION GUIDELINES

1.BACKGROUND INFORMATION

Since 1982, Habitat for Humanity Kenya has worked in over 10 counties across Kenya, enabling low-income families to access decent housing and water, sanitation, and hygiene services. Through the Vulnerable Group Housing (VGH) project, we provide new or improved housing to poor and vulnerable households in Kenya.

Currently, our typical house design is a 42sqm two-bedroom house (bungalow) comprising a sitting room, kitchen, store and two bedrooms. In addition, HFHK provides a 2000 litre water tank connected to the gutter on the house and a detached 2-door ablution block; a toilet and a bathroom. The house is built with concrete in foundation footings and ground floor slab. The roof structure is constructed with ordinary timber and finished with box profile roofing sheets fully fitted with UPVC rainwater goods. Both internal and external walls are built with either fired bricks or machine cut stones or Interlocking Soil Stabilized blocks depending on location. The house has ordinary finishes, plastered and painted interior, chipboard ceiling, tiled floor and keyed exterior. The total cost of construction (Materials and Labour) is approximately Kshs 750,000 (USD\$ 7,500). HFHK uses subcontractors from the communities we work in to do the construction work.

Communities that HFH Kenya serves are mostly rural and our anecdotal findings indicate the majority use firewood for cooking and prefer the kitchen to be detached from the main house but close enough for ease of operations. It is also preferred that the ablution block be outside the main house. There is no sewer system in most rural areas, most people, especially the low-income households, use pit latrines. The average size of a household served by HFH Kenya is 5 people with 3 being the smallest and 9 being the largest.

THE CHALLENGE

As part of increasing impact and reaching many families in need, HFH Kenya would like to re-design the current house to optimize space utilization, enhance affordability and promote health and well-being of families. HFH Kenya desires a solution that will significantly lower the cost of construction, enhance the habitability of the house, provide more flexibility in construction and utilize environmentally friendly materials. Most of the families that HFH Kenya serves have varying housing needs; some requiring larger spaces while others requiring smaller spaces. Sometimes the available funding is not sufficient to fully address the housing needs of families. HFH is seeking for flexible designs that allow for incremental building and tailoring spaces to suit the current housing needs and provide for future expansion as per the **technical requirements**.

The ultra-low-cost home design challenge is open to built environment students and graduate architects, engineers and designers. Participants are challenged to conceive a new and original concept for a low-cost home taking into consideration space, water, sanitation and energy. The competition will give entrants the opportunity to think about social, cultural and environmental effects in sustainable design, construction, and operation. Interested parties will register in multi-disciplinary teams of 3. Shortlisted teams will be invited to a design workshop for further brainstorming, presentation and selection of promising concepts to be developed further into complete designs. HFH Kenya will adopt the winning designs in building homes for vulnerable families across Kenya.

A more affordable house will enable Habitat for Humanity Kenya to reach and support more vulnerable families that deserve help.

6. TECHNICAL REQUIREMENTS

Must have:

- a. Detailed design of a home including but not limited to the following spaces:
 - Place to sleep
 - Place to eat
 - Place to cook
 - Place for ablutions
 - Place to relax and play
 - Water harvesting and storage
- b. Flexible enough to allow for incremental building of the home from a single room to two rooms and finally to a complete three rooms without any demolition or disruption during the extensions. At each stage of incremental building, the home should have basic facilities to allow for normal operations within a home.
- c. Spacious enough and functional; Each design base unit must not be less than 25m², 35m² and 42m² for the 1, 2 and 3 roomed units respectively and must be considered a habitable unit.
- d. Adaptable and suitable to Kenya's context:
 - Consider Kenya's climatic conditions and should demonstrate climate resilience
 - Different soil conditions
 - Comply to Kenya's development standards and building regulations
 - Consider the cultural traditions, beliefs, and customs of the Kenyan people
- e. Demonstrate creativity in:
 - Fusion of new modern technologies and traditional/contemporary technologies
 - Linking spaces to efficiently support basic operations within a home
 - Designing habitable spaces with a comfortable indoor environment
 - Choice of materials to include eco-friendly and locally available materials
- f. Ensure social inclusion of people with disability and the vulnerable
- g. Highly affordable to the low-income households:
 - Ultra-low construction cost; not exceeding Kshs 450,000 (1-room and basic facilities), Kshs 550,000 (2 rooms and the basic facilities) and Kshs 650,000 (3-room and basic facilities)
 - Maintenance free for the first 20 years
 - Durability of 50+ years

Nice to have:

- a. Renewable energy options suitable for a low-income household

Key Deliverables:

- a. Final submissions should have the following
- b. Detailed drawings including, but not limited to well annotated plans, elevations, sections, 3Ds and site plans
- c. Detailed bill of quantities with clear cost summaries for the various component
- d. Brief statement of design philosophy and elements (Not more than 2 pages)
- e. Power Point presentation of the design solution to be presented to the jury for assessment

2.ELIGIBILITY

The design workshop is open to built environment college students and young professionals in the fields of Engineering, Architecture, landscape architecture, Quantity Surveying, construction management and other relevant built environment fields within Kenyan Universities and technical colleges. Participants to be in multi-disciplinary teams (maximum size 3).

The following persons are not eligible to participate:

- a. Members of the competition committee and their immediate families
- b. Staff of HFHK and their immediate families
- c. The panel of judges and their immediate families
- d. Special advisors to the competition committee and the panel of judges

4.AWARD

The following prizes will be awarded to the winning solutions

- 1) 1st Prize -----30,000/=
- 2) 2nd prize --20,000/=
- 3) 3rd prize-----10,000/=

Certificate of Participation will be given to all entrants.

JURY

All eligible entries will be judged by a panel of persons comprised as follows:

- a. Representatives from the AAK (Architectural Association of Kenya)
- b. Representative from the HFHK (Habitat For Humanity Kenya)
- c. Representative from TCIS (Terwilliger Centre for Innovation in Shelter)

8. COPYRIGHT

The competitors, by submitting their designs, agree that HFHK shall own the copyright to the design that is selected for the award of a prize.

ii. Any design that is selected for an award of prize may only be used by its respective author(s) or by any other party solely with the HFHK written consent.

9. WARRANTY AND INDEMNITY

The competitor by signing the entry form:

i. Agrees to abide by the rules of the competition.

ii. Warrants that the entry is original and that the design belongs to him/her