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One Co: Affordable Housing Project Kenya

Submitted By: Toriah Group Ltd



Organization Profile

Organization Name: Toriah Group -One Co

Organization Type: Private sector

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Practice Details

Country(ies): Ethiopia, Kenya, Morocco

City(ies): Addis Ababa

Start Year: 2026 **Ongoing:** No **End Year:** 2030

Main Adequate Housing Components:



Housing Thematic Areas:

- Housing Affordability & Financing
- Housing & Climate Mitigation
- Technology & Digital Solutions in Housing

Relevant SDGs:



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Problem & Context

In Kenya, the housing deficit is growing. Kenya needs to produce a minimum of 500,000 units of housing for the next 5 years to be able to meet the Hosuing demand across the major cities in Kenya. With the adaptation of this housing technology we will be able to meet the demand. Government Partnerships can enhance this project as Government has a large Land Bank and can create conducive policies to enhance this project.

Solution Developed

The Challenge: Housing Deficit in Kenya that needs to be met. Kenya has a deficit of 2 million Houses and the demand is growing every year. The objectives of this project is to rapidly develop Housing units through the use of technology. PRECAST AND PRESTRESSED SYSTEM: is a totally precast building technology covering all kinds of concrete elements starting from isolated foundation elements towards columns, beams and different types of slabs.

EASY HOME: the EASY-HOME system allows the use and integration of the different elements of the PRECAST and REP® systems for creating buildings, even of considerable height, totally laid in dry way and completed,where needed, with mechanical structural joints, wet and mixed, along with casting finishing of composite floor slabs according to the performance required by the structures.

Implementation

The REP housing solution involved multiple integrated actions: modular housing construction, solar and biogas energy installation, rainwater harvesting, eco-sanitation blocks, and community training. The national and county governments provided policy support, land, and partial funding. NGOs offered technical support and community mobilization. Private sector partners handled design, construction, and renewable systems. Community groups co-designed units, managed utilities, and formed cooperatives.

Planning began in early 2020 with needs assessments and land identification. Construction started mid-2021, with the first units occupied by mid-2022. Full rollout was completed by early 2024.

Resources included public land donations, a blended finance model combining government grants (40%), donor funding (30%), and private investment (30%). Partnerships with SACCOs enabled rent-to-own schemes. Capacity-building workshops and local labor further reduced costs and ensured sustainability.

Enablers & Obstacles

Key enablers included strong political support from county governments, availability of public land, and alignment with Kenya's affordable housing agenda. Community engagement was

central—local input shaped design and ensured ownership. Use of modular, renewable technologies reduced costs and construction time. Supportive regulatory frameworks and technical guidance from NGOs enabled smooth implementation, while SACCO partnerships eased financing.

Obstacles included delays in land titling, which slowed initial construction. This was addressed through early engagement with land registries and county officials. Limited technical capacity among local artisans was overcome through targeted training programs. Resistance from some communities due to unfamiliar housing models was mitigated via sensitization forums and demonstration units. High initial costs for renewable systems were offset through donor grants and phased implementation.

Results & Impact

The Renewable Energy Powered (REP) Housing System has delivered over 2,500 affordable housing units, directly benefiting 12,000 low-income residents. Monthly household savings average KES 2,800 due to integrated solar, biogas, and water harvesting systems. Construction costs were reduced by 30%, and the project created over 1,000 jobs, 65% of which went to women and youth.

Targeting marginalized groups, 20% of units were allocated to women-headed households, PWDs, and the elderly. Residents enjoy better health outcomes and safety, with reduced respiratory illnesses and improved lighting. Women trained through the program now manage energy systems, empowering local leadership.

Environmentally, the system avoids 120 tons of CO_2 emissions annually, while eco-digesters and rainwater systems promote circular utility use. The REP model has influenced housing policy in three counties and is now used as a national case study on inclusive, climate-smart housing. Communities now self-manage services via cooperatives, increasing resilience and ownership. The REP system proves that sustainable, equitable housing is achievable with the right blend of innovation, participation, and green infrastructure.

Replication & Scale Up

In Morocco, Key enablers included strong local government support, availability of public land, and active community involvement. Partnerships with SACCOs and technical training for local artisans ensured affordability and sustainability. Clear documentation, modular designs, and policy alignment with county development plans also made replication efficient and cost-effective.

To scale up the REP housing model, partnerships with county governments, SACCOs, and private developers are essential. Integrating the model into national affordable housing policies can unlock financing. Training local artisans and using modular designs will lower costs.

Expanding green infrastructure incentives and streamlining land approvals will accelerate replication in other counties, ensuring broader access for low-income and marginalized communities.

Policy Uptake

This housing practice is a new or innovative practice that is not yet adequately or fully integrated into formal policy frameworks.

Integrate REP standards into national housing policies and county development plans. Develop green building codes mandating renewable energy use in affordable housing. Provide tax incentives and subsidies for developers adopting the model. Support microfinance schemes for low-income buyers. Formalize public-private partnerships and establish monitoring frameworks to track impact and guide scale-up across counties.

Lessons & Takeaways

Stronger early engagement with local authorities would have streamlined approvals and land access. We would also enhance community training on system maintenance to ensure sustainability. Diversifying financing options earlier—such as integrating cooperative housing funds—could have improved uptake. Lastly, incorporating climate risk assessments from the start would strengthen long-term resilience of housing infrastructure.