

Decent Homes for the Elderly, Tanzania

With a focus on women and the elderly in rural Tanzania, TAWAH trains women in construction skills and empowers them to build and improve homes in their communities. The organisation promotes affordable and sustainable housing, using locally available materials and environmentally sensitive design.



Submitting organisation: Tanzania Women Architects for Humanity (TAWAH)

Type of organisation: Non-profit

Key elements of the project:

- **Women empowerment and sustainability**

TAWAH Vocational Centre for Women trains women in construction skills, increasing their economic power and fostering other initiatives like the development of local credit groups. Through this project, elderly vulnerable women are given safe, dignified homes.

- **Environmentally – friendly design**

The homes use an interlocking soil brick system, produced on-site by women builders. The designs include passive cooling systems, natural ventilation and shading techniques, rainwater harvesting systems, and water saving toilets.

- **Small scale but strong impact**

The project has built six homes for the elderly. 79 women builders have been trained, 15 work as trainers and 30 as TAWAH volunteers. 150 secondary school students and 52 university students have also learnt from this work.

What inspires us ...

The project tackles the key issues of housing for vulnerable groups, sustainable materials and innovative training models. There is an emphasis on women's empowerment and training alongside house building, which has led to the development of collective savings groups and opportunities to improve livelihoods. TAWAH's impressive training centre serves as a hub for national and international trainees, and the organisation wants to replicate the initiative across Tanzania.

Introduction

Women in rural Tanzania can often find themselves trapped in poverty, economically reliant on men to sustain themselves and their families and unable to afford to send their children to school. Some female elders are affected by physical and financial challenges and live in unsafe and unhealthy conditions. They don't have opportunities to improve their living conditions or livelihoods. The construction industry in Tanzania, as in most countries, is highly male dominated, but it offers huge untapped economic and social opportunities for women.

This project, conceived and delivered by TAWAH, trains women in construction techniques enabling them to build environmentally sustainable and affordable homes, in this case six homes for elderly members of their community (with additional six homes currently under construction). It has also delivered a purpose-built training centre, helping TAWAH support more women in other communities.

Through the project, vulnerable and marginalised elders are given safe and secure homes that meet their physical and social needs. The trained women attain highly marketable skills with the potential to earn a good income, improve their own homes, and are encouraged to form new social and economic networks amongst other trainees. Those involved are also educated on protecting the environment, helping to minimise damage to the biosphere and climate.

In this way, the project addresses problems of housing poverty, age and gender inequality, social marginalisation, economic hardship and environmental degradation.

Context

The project works at Mhaga village in Kisarawe district, Pwani region in rural Tanzania. Mhaga Village, like other rural areas in Tanzania, grapples with housing poverty and gender disparities in the construction sector. The village comprises 372 households with a total population of 1,347 individuals, among half of which are women. Traditionally, women in Tanzania are not actively involved in construction, engaging instead in alternative, less-profitable work.

Housing poverty is a pressing issue in Tanzania, where limited financial resources often hinder access to decent housing. Studies show a lack of awareness and technical expertise in affordable housing solutions that use locally available materials and techniques.

A considerable number of elderly people live in inadequate housing conditions and are unable to address these housing deficiencies independently, due to age-related mobility issues, limited financial resources and a lack of familial or social support networks. Despite their physical limitations, they have good prospects for land ownership, which presents an opportunity for community-driven initiatives to improve living conditions.

Project Description

TAWAH pioneers sustainable solutions for low-cost housing, using locally available materials to minimize environmental impact and promote economic resilience. To achieve this vision, the organisation developed a training centre in Mhaga village. The training centre educates women to become builders, and the construction of homes for the elderly is part of the wider training programme developed there.

TAWAH's rapport with the community of Mhaga Village began in 2019 with the construction of a girls' secondary school. This positive collaboration led to the generous donation of a five-acre plot of land by the villagers. As the school project progressed, TAWAH turned its attention to the village's housing situation, particularly the needs of marginalised elders.

Launched in November 2021, the project has already constructed six homes, providing secure housing for six individuals. Six additional homes are currently under construction. The impact extends beyond these homes, having benefitted an additional 342 people through skills development programmes. This comprehensive approach embodies TAWAH's commitment to community development, environmental stewardship and the promotion of dignity, security, and well-being for all.

Organisation implementing the project

Tanzania Women Architects for Humanity (TAWAH) was formed in June 2010 by a group of Tanzanian women architects and engineers committed to enhancing social justice. TAWAH was registered as a non-governmental organisation in 2011.

TAWAH champions a holistic approach to community development. Its vision is to cultivate thriving, supportive communities where everyone has access to affordable housing and the support they need. Its guiding principles include partnership with marginalized communities, ownership and self-reliance, and sustainable, cost-effective construction practices that minimize environmental impact. It empowers women by equipping them with construction skills using readily available resources sustainably. This skilled workforce then constructs high-quality, low-cost homes using adaptable designs, fostering positive change within communities.

Beyond the training centre and the construction of homes for the elderly, other initiatives from TAWAH include:

- Design and construction supervision for the Jokate Mwegelo Girls Secondary School in Kisarawe in 2019, benefitting 540 girls.
- Construction of classrooms for special needs students at Pongwe Primary School, Tanga, in 2018, benefitting 670 children.
- Design and construction of six affordable model houses for flood victims in Dar es Salaam, 2012, benefitting six households.
- Maasai traditional house improvement project, Ololosukwani village, Arusha, funded by UNESCO in 2011, benefitting 20 women.

Aims and Objectives

The aim of the project is to equip communities -especially women- with the technical skills to lead the construction of high-quality shelters, combating housing poverty across Tanzania and achieving a better gender balance in the construction sector.

The project aims to:

- Ensure the well-being of elders.
- Provide communities with the necessary skills for housing construction.
- Teach sustainable brick-making techniques using local soil.

The project benefits:

- Elderly residents of the village, who get access to safe and secure homes.
- Female residents from the village, who are trained in construction.
- Secondary school students, who are invited to take part in activities such as soil testing, brick making, and safety training, or by collaborations aimed at addressing environmental issues within their school.
- University students from Lund University (Sweden) and Zanzibar University who visit the centre to learn and work with women on the production of earth bricks.
- Volunteers, who are female university students registered in the TAWAH volunteering programme for one year. They are actively involved in various activities, from design work to construction activities and office management.

The project has a strong focus on sustainability in order to reduce construction costs, minimise long-term maintenance costs and enhance the project's scalability to other communities. TAWAH's aim is to replicate the project across Tanzania.

Key Features

The approach is collaborative and community-centred:

- Local government authorities play a vital role in project implementation and community engagement, ensuring the project is aligned with the needs and priorities of the community.

- Community involvement is at the heart of the approach, from initial survey and selection of beneficiaries to design and construction phases. Community meetings are held to gather input on project design and ensure that interventions reflect local preferences.
- Students visit the project regularly to learn about innovative construction methods, contributing to knowledge exchange and capacity building.
- Close collaboration and communication are maintained with project funders, ensuring transparency, accountability, and mutual understanding of project objectives and progress.
- Representatives from partner organisations (universities, media, and other organisational allies) are engaged in ‘building days’ on site, presentations, and annual project evaluation visits.
- Elders play a crucial role in their housing projects. While their physical contributions may be lighter, their lived experiences provide invaluable insights that shape the design process. Elders may offer storage space for materials or share local knowledge. Additionally, their families and neighbours often assist with physically demanding tasks like site clearing and foundation digging. Prioritising the needs of the elderly and enhancing their quality of life significantly influences the approach taken on housing design. Homes are not just aesthetically pleasing, but practically relevant. This translates to features like natural light and ventilation for optimal indoor climate, ramps for easy navigation, and thoughtfully planned layouts that encourage movement and social interaction.
- Facilities such as pit latrines, cooking areas and rainwater storage are located outside the homes. Additionally, there is space for hosting visitors, acknowledging the importance of maintaining social connections and fostering a sense of community among elderly residents.
- Central to the approach is the use of compressed interlocking soil bricks, produced on-site by women builders. This not only reduces production costs but also provides women with valuable skills and knowledge about soil suitability for brickmaking, which they can apply to improve their own homes.

TAWAH implemented a transparent and inclusive selection process for housing beneficiaries. First, it obtained official endorsement from the district commissioner. Next, a community meeting was held to identify residents in precarious housing situations. Baseline and field surveys assessed the living conditions of these households and gathered information on residents, their social support networks, and land ownership. This data helped prioritise 45 households, with a particular focus on widows lacking social support. Uniquely, TAWAH incorporated a democratic vote, involving both the organisation and female construction trainees, to determine the final order of priority for home improvements.

There are high rates of female unemployment in rural Tanzania. Many women are married young and lack access to higher education. They are trapped in cycles of poverty, relying on men to support them while engaging in small income-generating activities that are insufficient to sustain their families or send their children to school. By specifically targeting women, providing them with practical skills to generate income through construction, the project empowers them and creates a resilient community of female workers.

In the first phase, any woman that was interested and able to commit to the one-year training programme was able to enrol free of charge. Later phases targeted women below the age of 35 and required a small contribution to the project. A total of 79 women were trained between 2021 and 2023, with 20 of them later receiving advanced training at the Government Vocational Training Institute. Announcements for training programmes are posted at the centre, shared with local leaders, and circulated within the community of women builders. Participants are accepted on a first-come, first-served basis.

The project also recognises the importance of involving men. Skilled male builders train women at the TAWAH centre and men also play a role in supplying water and building materials to construction sites, using their own vehicles. TAWAH is now receiving impact stories showing that men are working alongside their wives to renovate and improve their homes.

Innovation

- The project uses a participatory approach that actively involves community members. The community is encouraged to contribute their insights and preferences.
- A range of features promote sustainability and enhancing comfort. House designs employ passive cooling systems, using natural ventilation and shading techniques, reducing the need for artificial cooling.
- Local soil obtained from digging foundations and toilet latrines is used to make interlocking bricks for construction, thus reducing costs and time.
- Rainwater harvesting systems are incorporated to deal with water scarcity in the area.

Funding

The total cost of the project is \$107,000 USD. This includes the activities of the training centre, construction of 12 homes, surveys and community engagement, project staff costs and support. Funding has been secured until 2026, when the 12 homes are expected to be completed.

TAWAH fundraises to supplement the support from its main donors. This includes outreach to potential donors, grant applications, and fundraising events. Other support partners include ITV Media, Zanzibar University, Tanzania Commercial Bank and the Building Research Institute.

TAWAH is implementing the following measures to ensure the sustainability of the project and reduce donor dependence:

1. Developing the TAWAH Vocational Centre into an accredited institution in Tanzania, offering training activities and conducting research activities with a tuition fee.
2. Forming community groups of women builders, who hope to start their own businesses and improve their homes through a cooperative model.
3. Investment in the production of earth bricks for sale, with proceeds going to the centre.

4. Acquisition of an additional 10 acres of land, which will be used to develop organic farming and poultry training activities. Products from these activities will be sold to support project activities.

Impact

Financial

The project has a positive impact on the local economy, generating income and employment opportunities not only for women but also for other community members involved in the project.

By providing training in low-cost and sustainable construction techniques, the project has not only equipped women with valuable skills but also created employment opportunities that contribute to their economic independence and well-being. Twenty women who have been trained to an advanced level are now employed as skilled workers, working on the construction of other community projects or employed at the centre.

The project facilitates land ownership for the elderly population. For instance, in one case, a widow without children was living on land owned by her brother-in-law. To ensure tenure security and enable housing construction, village leaders convened a meeting with the landowner. Following discussions, the land was subdivided, and full ownership was transferred to the beneficiary through village title deeds, which were prepared and signed by village leaders. This is a crucial prerequisite before any construction begins and ensures that elderly individuals have legal ownership and secure tenure of the land where their homes are constructed, thereby safeguarding their housing rights.

Beyond direct beneficiaries, the project impacts the families of the women trainees, ranging from nuclear families to extended relatives. The training stipend, averaging approximately \$2.5 USD per day, has empowered trainees to set up a credit group known as 'Mhaga Women Builders.' They have opened a collective bank account and now provide each other with loans, facilitating home improvements and fostering a sense of community support. Families have also begun collaborating to produce construction materials for their new homes, with women taking on supervisory roles.

Social

TAWAH fosters collaboration with local government leaders, including District Commissioners, to raise awareness of their interventions. This collaboration allows them to advocate for resources that benefit women, such as loans for home improvements or starting businesses. Additionally, TAWAH is compiling impact stories for a workshop with stakeholders in housing and community development. This workshop aims to raise awareness of community support for elders and promote the benefits of decent, low-cost housing. Ultimately, TAWAH seeks to influence changes to policy on housing and the welfare of elders in Tanzanian communities.

By directly addressing housing challenges faced by elders, the project has enhanced their quality of life and fostered a sense of dignity and security for vulnerable members of the community.



The project has also had a positive impact on students, volunteers, and other visitors. The partnership with two secondary schools aims to influence teaching curricula. University students have the opportunity to gain experience in innovative construction methods and community development, gaining knowledge and skills that can be applied in their future careers. Volunteers contribute their time and expertise, fostering a sense of community engagement. Visitors experience the positive impact of the project firsthand, inspiring them to become advocates for social change and sustainable development.

Other residents with financial resources and a growing appreciation for using local resources, such as earth-based bricks, are expressing interest in replicating the model to enhance their own housing conditions.

Environmental

- The project prioritizes the use of compressed earth bricks. Bricks are made reusing soil excavated for the foundation of homes, reducing the need to buy and transport building materials, reducing embodied energy and minimizing environmental impact.
- A wastewater recycling plant was constructed at TAWAH's Vocational centre, serving as a learning platform for the community on recycling wastewater from public facilities like schools and hospitals. The water produced from this plant is used for farm irrigation, reducing the strain on natural water resources and promoting sustainable agricultural practices. Rainwater harvesting and storage is a key element of all homes constructed through the project.
- There is a commitment to reforestation and increasing greenery. The community and visitors are actively engaged in tree planting and gardening activities, with each visitor asked to plant a tree. Over the past three years, a total of 140 shading and fruit trees have been planted, contributing to biodiversity and environmental sustainability.
- The project promotes environmental awareness and education among elders and community members. Before handing over the homes, elders are provided with flowers, trees, and grasses to plant, fostering a sense of environmental stewardship and sustainability.
- The centre uses solar lights, and is in the process of installing a solar water pump. Movable solar lights were purchased for three of the elder beneficiaries, and the project is actively seeking funds to invest in a more durable and powerful solar system.
- Waste sorting practices are implemented at the TAWAH Vocational Center, teaching recycling to trainees.

Learning, evaluation, and recognition

The impact of the project has been measured internally by TAWAH across various dimensions:

- Number of homes built: six completed homes to date.
- Number of people housed: six people to date.
- Number of people positively impacted: 342 people to date. This encompasses various stakeholders influenced by the project in diverse ways: 79 women builders (trainees), 150 secondary school students and 52 University students, 15 trainers and 30 TAWAH volunteers.

The success stories of the Mhaga women builders and the transformation of elderly homes have gathered attention from national media outlets and neighbouring communities. As a result, there's a growing interest among women to participate in similar projects.

Transfer and future plans

The project was originally inspired by the Women's Opportunity Centre in Kayonza, in Rwanda and the brick making technology that has existed in Tanzania since the 1970s.

The TAWAH Vocational Centre acts as a hub for skills development and training. The centre is equipped with accommodation facilities capable of hosting 32 women at a time, allowing women from other regions to stay at the centre, whilst learning low-cost housing skills and empowering themselves with valuable knowledge to take back to their own communities.

Women are encouraged to become agents of change in their communities - to share their knowledge and skills with others upon returning home, spreading the benefits of low-cost housing and women's empowerment to a wider audience.

Looking ahead, the training activities at the hub are set to expand, with plans to incorporate skills development in furniture making and agriculture. These additions will not only diversify income-generating opportunities for women but also serve as a catalyst for broader economic growth and community development.

The six homes built so far cover 13% of elderly households in the village, meaning there is still a pressing need. TAWAH plans to construct an additional two homes annually from 2024 to 2026, for which funding is already secured.

There is much curiosity and a desire to be inspired and learn more about the homes for the elderly beyond Tanzania's borders. Lund University students from Sweden visit each semester, and international interest in the project has prompted TAWAH to publish materials, ensuring wider dissemination of their efforts and knowledge.



To achieve its vision of *decent shelter for all*, TAWAH plans to take the project to other places across the country, with a focus on using locally available materials. For example, in the Mbeya region, bamboo is a readily available material ideal for housing construction. The long-term goal is to set up satellite training centres in at least four regions of Tanzania. This is dependent on TAWAH's ability to secure future funding.

World Habitat Reflections

TAWAH works to counterbalance Tanzania's male-dominated society and construction industry by empowering women at various levels to create changes in their communities and lives, whilst resolving crucial housing issues for very vulnerable groups. An award would be a recognition of their efforts in promoting sustainable development, gender equality, and social inclusion. Additionally, it would demonstrate that positive change is possible when communities come together to address pressing challenges. The support of World Habitat could make a real difference at a moment when the organisation is looking to take the next step in scaling up its activities.