

The project: tumsania

- EIN BEITRAG VON MAREIKE THIEDEITZ, TECHNISCHE UNIVERSITÄT MÜNCHEN -

What it is about

In June 2019, in a cooperation project between a group of civil engineering students from the **Technical University of Munich** [and the NGO “Forward Step Organisation”](#), an arts and learning center was developed, planned and constructed in Bagamoyo, Tanzania.

The project followed two principles: “**Education and engineering**”. Civil engineering students get insights in local and global building techniques and deal with different construction materials and building materials and tools during a practical project. For instance, the concept development and the planning of the adoptable building manners happened after analyzing the **locally available resources** as well as the available materials and building tools and machines, which is completely different from everything civil engineering students in Germany know. Accordingly, the concept was planned with easily adoptable building styles and took all circumstances into account. The students got to know the local sandcrete building style, which is a rural version of the well-known concrete building style in Germany. Moreover, they figured out methods for the replacement of cement using **natural supplementary materials** like **burnt rice husks**. Finally, they planned concepts regarding natural ventilation and little sanitation units.



Workshop Participants ©Svenja Wolf

A second principle of the workshop was the aim of **international networking** between the young generation for **cultural exchange**. During globalization international collaborations are of utmost importance. The understanding for other cultures, religions and circumstances in living manners are necessary for a peaceful future.

The colonialist history between African and European countries as well as the current post colonialism are a highly actual topic. Not only in politics but also in the academic world good collaborative bonds and teamwork are pursued. This is also the concept of the project “**Easy building**”: Building connects. A building project is teamwork and will finish only successful with

forthrightness, tolerance and curiousness. The project follows with its whole concept the [17 sustainable development goals of the United Nations](#). The cooperation with the Forward Step Organisation (FSO), which is an organisation fighting for girls and women empowerment, shall help getting an awareness for different nations and cultures and lead to a sustainable exchange between the two countries.

Follow up

After the building project during June 2019, the Arts and learning center was finished insight and is used by the FSO for learning classes and dance projects.



Art and Learning Center in Use ©Faudhia Zando

Especially the new collaboration project of the FSO, "[Circus for life](#)" which is also a collaboration between German and Tanzanian Circus students and contains an exchange program, directly has used the new building for classes.

What`s next

The Technical University of Munich and FSO consider working on more local projects for sanitation and schools

where it is needed the most. Still, not only buildings are needed, but expertise as well. Especially with building materials and buildings themselves being one of the **striking impacts on climate change (cement production is responsible for 8% of global carbon dioxide emissions)**, more climate friendly building methods have to be found in Germany for already industrialized countries, but for fast developing African metropole regions as well.

Therefore, prospectively lectures regarding more eco-efficient concretes and considering recycling methods and using natural wastes will be held. International cooperation and knowledge transfer following the maxim "**Think globally, act locally**" are planned.

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