HA\|SC project

The HA\|SC project is an initiative for building a school in rural Ghana. It is about the construction of a handmade classroom — capacity of 40 scholars — for the Abetennim community, using local and recycled materials, traditional construction techniques plus innovative practices with collaborative construction methods. The design respects the social-cultural context and emphasize in the use of local resources. Additionally, the ecological construction of the school will authorize the children of Abetennim Village and nearby rural communities to continue their education promoting social development and sustainability, while being attentive to human rights. For the realization of the project we formed an interdisciplinary team of 35 young volunteers and will carry out a building workshop. It is about a participatory planning process that everyone can take part in; first and foremost the local community.
Cooperate for fair and sustainable development initiatives in active collaboration with disadvantaged people or communities. This process shall follow principles of human solidarity, non-discrimination and will be aimed at promoting their self-sufficiency;

This initiative starts from the idea of volunteering and creating synergies. It starts by people who want to help a disadvantaged agricultural community, to place new bases for their development, to eliminate inequality and achieved by creating a sustainable design project that promotes “the most powerful weapon that you can use to change the world; education.” (Nelson Mandela)

This project encourages human rights and especially education for all, without discrimination of color, race or gender. We believe that education is the means by which people in Abetennim village, but also in the rest of rural communities in Ghana, will be able in the future to be more self-sufficient.
Asante traditional architecture form

Asante traditional symbol meaning and inspiration

OWO FORO ADOBE

symbol of steadfastness, prudence and diligence

passive design strategies

water harvesting

cross and stack ventilation

sun protection

window design

plastic bottle

glass bottle

fill with earth

cut

stabilization

transparent/coloured tape

net (twine/wire)

Facilitate the use of appropriate technologies, materials and labour adequate to local values, to the cultural specificity and responsive to the natural environment;

Our first intention for this project arose from the spirit of the place. The school was designed as a cluster of ten classrooms surrounding a central courtyard. The organizational logic of the cluster, as well as the form of the buildings is inspired by the traditional Asante architecture.

The tropic climate is characterized by heavy rainfall, warmth and humidity. Therefore, keeping in line with the sustainability of the building, passive design strategies have been applied for the maximum cross and stack ventilation, the sun protection of the classrooms, plus the water harvesting system. The materials used are mainly local such as earth and wood. The design of the classroom meets low-tech solutions and the project will realized under the synergy of local craftsmen, Abetenim community and our team.

We tried to highlight special aesthetic in our design, as is an essential element of vernacular architecture and local culture. The light, which penetrates the glass bottles, imparts the unique aesthetic of the classroom, along with the window motif that creates a play on light and shadow. This motif is from the Ashanti culture and represents steadfastness, prudence and diligence in the community of Abetenim.

The nature of the project
Assimilation with the ambiance of the village
Sustainability
local materials and traditional construction techniques
Recycled materials and innovative practices
Upcycling
Affordability
Collaborating construction methods

A Handmade School for Rural Ghana || Lida Lioupi & Panagiota Stergiopoulou

#ASFAW
Support participatory, democratic, multicultural and interdisciplinary processes and approaches in strengthening community solidarity as a factor of rural and urban social development.

Our vision is to create a multicultural synergy consisting of the community of Abetenim and volunteers from all over the world.

This project is a two-way process. On one hand, we will help in the construction of the classroom so that the children are able to continue their education while at the same time young volunteers will learn the traditional construction techniques of the Asante and a more ecological approach of architecture through the use of local materials and available resources.

The idea of upcycling plastic and glass bottles as fundamental building components, a practice also known as the Bottle-Brick technique, enables everyone in the construction process; even the children could participate in the construction of their own school.

The building itself is a process of experimentation and learning for the community as the systems they learn can be applied in new constructions in the near future, rendering them more self-sufficient.