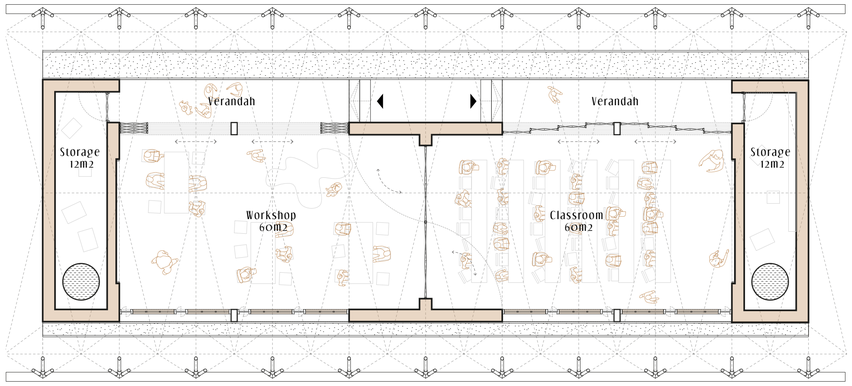
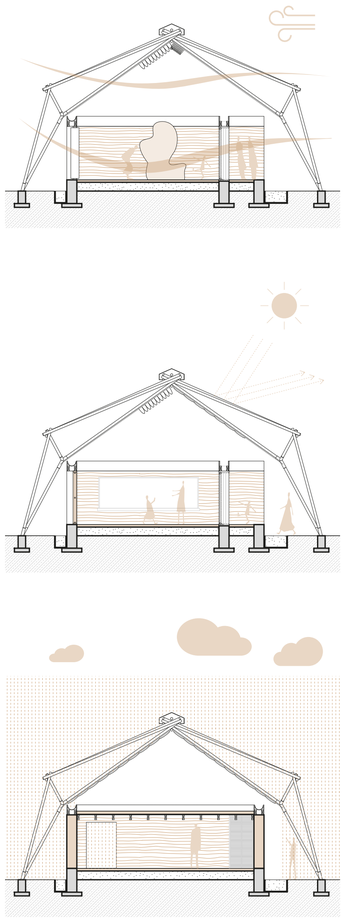
A SHELTERING ROOF

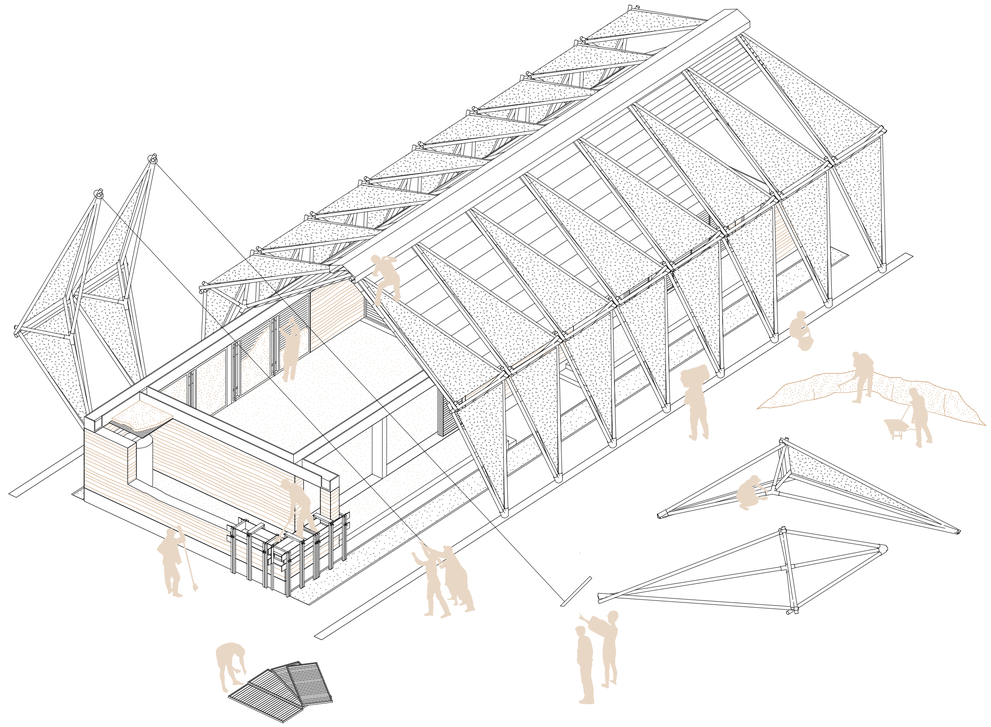
Singida's region is exposed to a subtropical climate defined by the 1200m altitude of the plateau on which it stretches. The Nka Foundation proposes to build there a vocational school using raw earth as an ancestral building material abandoned today by the population.

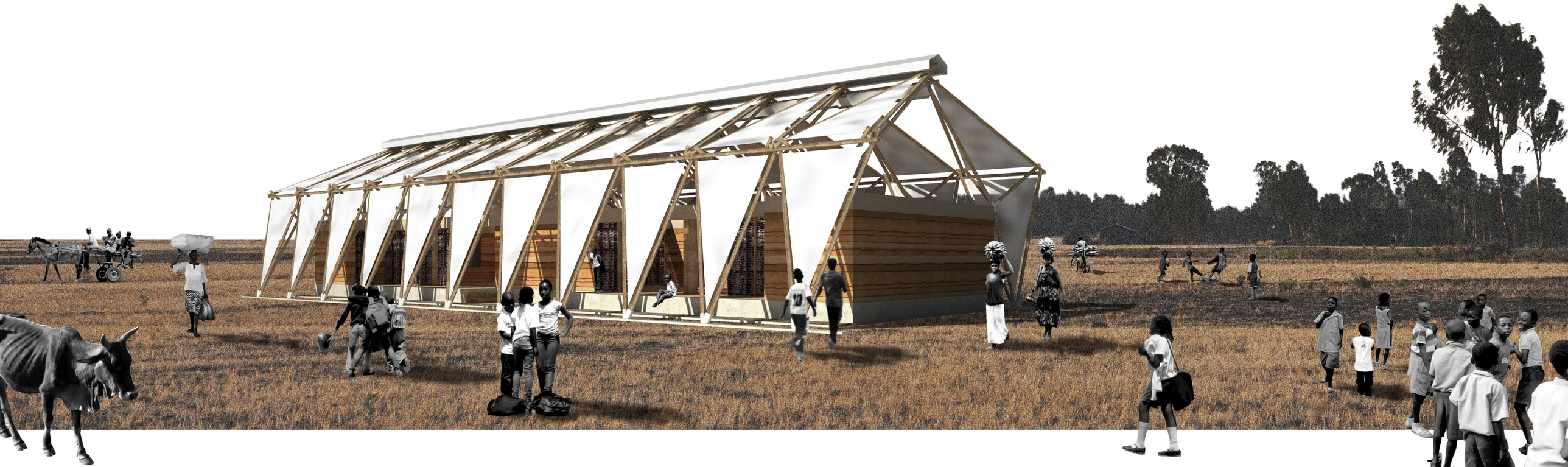
Facing the important climatic constraint, the roof is regarded as the founding element of the project. The latter, separated from the walls, shelters the earth construction from the beginning of the building work, protects the users, and gathers them in a same place. The structure's design results from cost optimization and is inspired by geometrical primitive shape characterising African art. Stretched canvases cover the roof, providing an adaptable protection to meteorological conditions and allowing the salvage of rainwater.

The sheltered space can welcome multiple scalable uses. A base structured by continuous foundation defines it, and allows the protection of earth walls from capillary actions. These walls constitute massive blocks for material and rainwater storage. Between these volumes, space is opened and uses can blend.







Common services	2 720 USD	Roofing	8 425 USD	Interior spaces	5 923 USD
Transport	$801	Continous foundation x1	$35	Continous foundation	$2 434
Formwork	$134	Post (structure + canvas) x1	$348	Soil	$640
Laborer force	$1 785			Walling	$1 388
				Carpentry	$261
				Miscellanous	$1000

TOTAL 2 CLASSROOMS 17 067 USD