Alternative Soil Blocks for Affordable Construction

Solution by: **Haileybury Youth Trust (HYT)**

→ This durable, compressed, interlocking soil block provides a sustainable alternative to conventional fired bricks in developing countries.

The manually pressed Interlocking Stabilized Soil Block (ISSB) is a **low-cost, low-carbon alternative** to the conventional and environmentally damaging fired brick. Mixed with a small amount of cement and **cured rather than fired**, the soil block is proven to be strong, cost-effective, and environmentally sustainable.

The ISSB has a wide range of construction applications, including rainwater harvesting. In meeting increasing needs for housing, schools, and water provision, the ISSB technology is proving not only a carbon-saving alternative to fired bricks, it is also economically viable. The ISSB has already **transformed lives and employment opportunities through training programs** across East Africa, while preserving the region's fragile environment. The technology can be readily adopted throughout Africa.

Why a Sustainia100 solution?

Vast numbers of trees are cut down and used as fuel to produce traditional fired bricks in Africa. Such deforestation is already an environmental concern in countries, such as Uganda, with rapidly growing populations. Since the ISSB is not fired, no trees are chopped down to fuel brick kilns, which reduces CO2 emissions.

The Triple Bottom Line

ENVIRONMENTAL

Several reports have found that the ISSB technology provides significant reductions in CO2 emissions as well as biodiversity preservation.[1,2]

SOCIAL

The simplicity and low cost of the technology means it can be readily adopted among the poorest communities in developing countries.

ECONOMIC

Savings of up to 30% are possible when using the ISSB technology as opposed to conventional fired bricks, according to HYT.

Developed: Kenya and Uganda

Deployed: Uganda, Kenya, and Tanzania

"THIS SIMPLE CONSTRUCTION TECHNOLOGY IS TRANSFORMING UGANDAN COMMUNITIES, MEETING BASIC HUMANITARIAN NEEDS SUSTAINABLY."

Russell Matcham,
Director, Haileybury Youth Trust

The Interlocking Stabilized Soil Block provides a sustainable and appropriate solution to Africa's need for viable, environmentally friendly construction technologies.