

# INTERLOCKING STABILIZED SOIL BLOCKS IN KENYA

## Introduction

Through reading Andrew Okello of Kariobangi Light Industries in Nairobi has discovered a wealth of technologies and has been able to fabricate various machines using locally available resources.

Andrew has benefited from the Practical Action's Technical Enquiry Service (TES) from both the UK and our Kenya office. He has used TES since the year 2000 and he made his first machine from a book sent through from Practical Action UK. He then followed this up by visiting the Practical Action website and this opened the door to a wealth of technical knowledge that was accessible free of charge including technical briefs, engineering drawings, videos, stories of change and multimedia presentations.

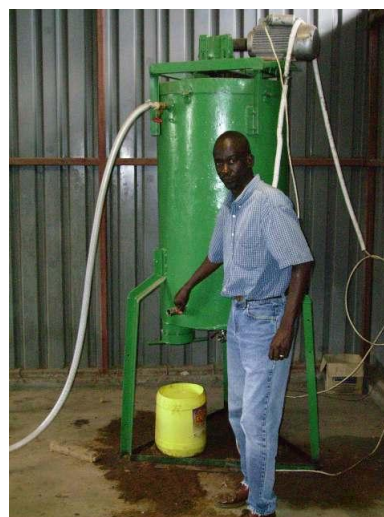
## Replicating Technologies

Andrew Okello has used our resource centre in Nairobi for many years where he borrows publications. He adapts the working technologies to make simpler and affordable ones that can be used locally.

Other machines that Andrew has fabricated using information from Practical Action publications include a manual screw press for oil extraction and a Jua Kali treadle irrigation pump. He has become well known in the industry as his machines are affordable.

## Breakthrough

His latest machine from information provided from Practical Action is an interlocking stabilized soil blocks press. The blocks made from this machine are compact and efficient, and have been approved by the Kenya Bureau of Standards – (KS 012070) as permanent walling materials.



Andrew Okello with the Biodiesel Oil processing machine.

stories of change



The block making machine.

The machine is selling at 55,000 Kenya Shillings, 725 US Dollars, 466 GB Pounds or 529 Euros

The machine costs less compared to what other organizations are selling in the market. He is in the process of discussing with the local banks and Ministry of Youth so that the unemployed youth can acquire the machine at a lower interest rate. He is also negotiating with Micro Finance Banks to offer soft loans to interested youth.

This will help young people in the rural areas to afford the machine and start producing affordable interlocking blocks which are cheaper than the other building stones. In addition to creating a job market for the youth people will be able to put up houses, water tanks using the interlocking blocks and saving on cost.

### Beneficiaries

Andrew intends to expand his business in Nairobi and its environs. The beneficiaries will be the unemployed youth who will find jobs in making interlocking bricks using the machine. The indirect beneficiaries will be the owners of the houses who will be able to put up houses at a cheaper price. Availability of interlocking blocks makes construction more affordable as they use very little cement and therefore construction becomes cheaper.

### Benefits

In addition to access to affordable houses by a large number of people new economic opportunities for youths who buy the interlocking block making machine will also be created.

Due to the financial downturn and economic challenges facing the country the company is making the machine available through installments based purchase agreements where the buyer can pay over a longer time period.

### Conclusion

Practical Action believes that the right idea, however small, can change lives. It can create jobs, improve health and livelihoods, and help people have better lives. Making information accessible helps poor people in developing countries to use their knowledge and improve their living conditions. The case study demonstrates that information/technologies provided by Practical Action can be replicated using locally available resources. Andrew tells me he appreciates Practical Action as they share their information for free, previously he couldn't make the interlocking brick making machine as the patent rights were owned by one organization but he tells me since Practical Action information is free he was able to present his machine and blocks to Kenya Bureau of Standards and it was approved.

See Making Stabilised Soil Blocks Practical Action Southern Africa

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Practical Action is a development charity with a difference. We know the simplest ideas can have the most profound, life-changing effect on poor people across the world. For over 40 years, we have been working closely with some of the world's poorest people - using simple technology to fight poverty and transform their lives for the better. We currently work in 15 countries in Africa, South Asia and Latin America.

# stories of change