

ILLUMINUM GREENHOUSES

2016 Nominet Trust 100 Winner

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2016

LOW-COST, HIGH-TECH GREENHOUSES HELP FARMERS IN KENYA

Project URL: <https://illumiumgreenhouses.com/>

Project Twitter: [@GreenhouseKenya](https://twitter.com/GreenhouseKenya)

Organisations Involved Illuminum Greenhouses <https://illumiumgreenhouses.com/> ([@GreenhouseKenya](https://twitter.com/GreenhouseKenya))

AAAS

African Rethink Awards

Asme Foundation

EOGSEA

GFIA

Global Entrepreneurship Summer School

Global Innovation in Science Technology

M-Lab East Africa

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- Economic Empowerment
- Data
- Mobile
- Physical Computing

Agriculture contributes to 24% of Kenya's GDP and provides employment for over 80% of the population. However, the sector is facing a myriad of challenges. The country's 6.5 million small-holder farmers depend on rainwater for crop irrigation, and suffer from pests and unpredictable weather due to climate change. Flooding or drought can lead to food shortages, forcing the government and NGOs to intervene with food aid.

Childhood friends Brian Bett and Taita Ng'etich, whose families are farmers, learned this the hard way when they set up a tomato farm to earn extra cash while studying at university. The farm promptly flooded, destroying their young crop. They set out to explore better solutions to farming, using low-cost materials and advanced sensor technologies.

The pair first built themselves a greenhouse equipped with irrigation technology. When neighbours kept knocking on their door asking whether they could build them one too, they founded a business called Illuminum Greenhouses.

Each greenhouse is fitted with sensors that monitor temperature, humidity and soil moisture. Text messages alert farmers if they need to turn the irrigation system on or off, which significantly helps to conserve water. The technology runs on solar power and the greenhouses are half the price of most others on the market.

At least 750 Kenyan farmers have taken to using Illuminum's smart farming technology, and co-founders Brian and Taita have earned an audience with President Barack Obama to discuss their venture during the Global Entrepreneurship Summit in Nairobi this year.

They continue to dream big: "This is a scalable innovation that can be deployed all over Africa and Latin America," says Taita. Follow the team's news and farming tech blogs at: <https://illuminumgreenhouses.com>

Image courtesy of Bread for the World

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