



**SUSTAINABLE  
LIVING**  
YOUNG ENTREPRENEURS AWARDS

Unilever

HRH THE PRINCE OF WALES YOUNG SUSTAINABILITY ENTREPRENEUR PRIZE

in partnership with:



UNIVERSITY OF  
CAMBRIDGE  
INSTITUTE FOR  
SUSTAINABILITY LEADERSHIP

## Liisa Petrykowska, 31

**Initiative: Ignitia**

**Region of impact: West Africa**

**A social enterprise that has developed the world's first accurate tropical weather forecasting model. Based in West Africa, forecasts are sent to small-scale farmers via SMS.**



The impacts of climate change are already being felt in the tropics, with changing rainfall patterns and seasons impacting the yields of smallholder farmers. Current models for predicting weather fail to provide accurate forecasts for the tropics, home to 40% of the world's population, 80% of whom are smallholder farmers.

### **The world's first accurate tropical weather forecasts**

Ignitia is the world's first highly-accurate tropical weather forecasting company. Using proprietary algorithms tailored for the tropics, the company, founded by Liisa Petrykowska, 31, creates GPS-specific forecasts that are twice as accurate as existing models. Ignitia partners with local telecoms providers to send 48 hour forecasts, monthly outlooks and six month seasonal outlooks to farmers in West Africa via SMS. The low-cost service is paid for through a micro-payment scheme.

Liisa first observed that existing weather forecasts for the tropics were extremely unreliable while working as a visiting scientist at the University of Washington. She teamed up with three other international scientists involved in physics research and together they spent four years developing new technology that increases the accuracy of tropical weather forecasts.

### **Increasing yields for smallholder farmers**

Using weather forecasts can double yields for smallholder farmers in West Africa and has also been shown to increase income by as much as 80%. Ignitia's forecasts minimise risk and maximise yields at every stage of the farming cycle, helping farmers optimise the application of fertilisers and planting time, as well as saving money on the hire of machinery and labour.

During Ignitia's first full year of operation, 80,000 farmers subscribed to the service. In the next two years, the company has plans to extend coverage in Ghana and launch in Mali, Senegal, Nigeria, Niger and the Ivory Coast.

View Liisa's competition entry [here](#).