

**EMBARGOED** to 0001 Hours, Wednesday 18<sup>th</sup> June

## **HELPING SMALLHOLDER FARMERS ADAPT TO CLIMATE CHANGE**

### **The Issue**

Climate Change will increasingly affect how and where tea can be grown, and this is a serious problem for people who depend on it for a living. Rising temperatures, variable rainfall, drought, and increased incidence of pests and diseases pose high risks.

Smallholder farmers are particularly vulnerable because they have less money to spend on adaptation measures, such as more resistant tea clones, input materials like fertiliser and pesticides, and efficient water management, such as rainwater harvesting and drip irrigation systems.

Kenya is the world's third largest tea producer and over 60% is produced by smallholders. The tea sector employs around 3 million people directly and indirectly, 8% of the population. The potential impacts of climate change were demonstrated in 2009 when a drought led to a 30% drop in production for Rift Valley producers.

### **The project**

The Ethical Tea Partnership and the German Development Agency GIZ ran an award-winning project from 2010-13, which helped more than 100,000 Kenyan smallholder farmers to increase their resilience to climate change and secure their future livelihoods. They worked in partnership with the country's largest tea smallholder cooperative the Kenya Tea Development Agency (KTDA), and Marks & Spencer.

Farmers were taught about the impacts of climate change and how to adapt to them, and trained in good practice, low-cost farming techniques.

- More than 3,500,000 trees have been planted on farms or are growing in nurseries, to provide shade for tea bushes, help the soil fix nitrogen and provide fodder for livestock.
- More than 600,000 drought and frost resistant tea clones have been planted or are being grown in nurseries.
- More than 25,000 energy efficiency stoves have been installed, reducing the need to cut down trees for firewood.
- More than 2,500 farmers installed rainwater harvesting and drip irrigation systems.

The ETP/GIZ project developed a comprehensive training manual on climate change adaptation techniques and a pool of trainers from 10 KTDA factories, who then went on to train smallholders. They also promoted KTDA's microfinance scheme, giving smallholder farmers access to the finance they needed to take measures to increase their resilience.

KTDA have found the training so useful that they are including it in their Farmer Field School Curriculum, and all 560,000 farmers within the cooperative will have received climate change adaptation support over the next few years. The project has won a Marks & Spencer Plan A Environmental Award and a Tea Board of Kenya award for Best Practices in Climate Change, and parts of it have been adapted for use in Farmer Field Schools in Malawi and Uganda, supported by ETP, IDH – the Sustainable Trade Initiative, and Tata Global Beverages, which produces Tetley Tea.

### **Case study**

Thomas Makaya, farms four acres of tea on an eight-acre plot in the Mudete catchment 400km west of Nairobi, where climate change is forecast to reduce land suitable for tea production by 40% by 2050. He has implemented most of the strategies he learnt through the climate change adaptation programme.

He has made bench terraces and water retention troughs throughout his farm to conserve his soil and water, and to improve its fertility he is composting all the waste from his kitchen and animal beddings. To reduce water stress on his tea bushes he uses tea prunings as mulch and has planted shade trees. He has partitioned his farm into plots with Napier grass, which attracts insect pests away from his crops.

Thomas diversifies his tea income by selling milk from his three goats and one cow. To increase income he sold his two indigenous cows, which produced three litres of milk a day and bought a dairy cow, which produces nine litres. His trees provide fodder for his animals. A new energy saving stove has reduced his need for firewood by 70%.