Biomimic Tree: Pushing agriculture up the agenda @cop23

Drawing attention to the impact that climate change is having on rural communities in developing countries, British artist Silas Birtwistle unveiled his Biomimic Tree at the United Nations' Climate Summit (UNFCCC COP23) in Bonn, Germany. Sponsored by the International Fund for Agricultural Development (IFAD), a UN agency that is helping smallholder farmers adapt to and mitigate climate change, the installation uses recycled plastic to depict a tree which only fully comes alive when water runs through it.

"At the bottom of the tree there is a small pump which takes water through a series of clear pipes to fruit and birds, which all gently move, turn, spin and chatter in response," said Birtwistle. "Every five minutes, the pump will activate and the tree will come to life, water will trickle, the birds will sing and the leaves will flutter."

> *Raising awareness on #climatechange: check out @SilasBirtwistle Biomimic Tree @COP23 https://t.co/s9LZejHqXl pic.twitter.com/K5IsxMJ9aw*— IFAD (@IFADnews) November 7, 2017

This sculpture highlights the dependence of all living things on a functioning healthy ecosystem. The tree provides food and a home to animals and birds. It also offers shelter from wind and shade from the sun, allowing crops to thrive and feed families. Trees also stop topsoil erosion in arid areas and can act as extremely effective carbon sinks.

"The water running through the tree highlights the increasing importance of this critical resource due to climate change," said IFAD's Environment and Climate Division Director, Margarita Astralaga. "When the water is running the tree comes to life, when the water stops the tree comes to a stop, or dies."

> *#Poésie au milieu du bruit @COP23 Un écosystème artificiel créé par le sculpteur @SilasBirtwistle #BirdWhistle #ChantsdOiseaux #BiomimicTree pic.twitter.com/46QXgRjiLi*— ONU Climat (@CCNUCC) November 7, 2017

Restoration efforts focused on planting trees on degraded lands

She added, "Right now climate change issues such as water scarcity and erratic weather patterns are adversely affecting smallholder farmers in the developing world. But IFAD-led solutions are empowering them to combat and overcome these issues. "

In its new Strategic Framework IFAD has renewed its commitment to enhancing biodiversity alongside increasing agricultural productivity and lowering greenhouse gas emissions from agriculture while contributing to poverty reduction.

"The sculpture highlights IFAD's restoration efforts which focuses on planting trees on degraded lands to stop soil erosion,

form a barrier to desertification and provide shelter to crops," added Birtwistle.

In the Sahel region of Africa, IFAD has already rehabilitated almost 300,000 hectares. For example, in Niger IFAD regenerated 100,000 hectares by protecting land from overgrazing and deforestation and replanting trees. Once barren land now has approximately 50 trees per hectare. In total IFAD's agroforestry and related activities have contributed to the removal of over 58,000 tonnes of carbon dioxide from the atmosphere.

The beauty and crucial role of sustainable climate-resilient agriculture

"We wanted negotiators at UNFCCC COP23 to see for themselves the beauty of sustainable climate-resilient agriculture and the crucial role this plays in the wellbeing of rural communities," said Birtwistle.

"Farmers have to work with nature to create a truly sustainable food secure future," said Astralaga. "Working with Silas, exhibiting this amazing Biomimic Tree, we show the very real challenge of climate change and environmental sustainability for smallholder farmers in developing countries."

IFAD's investments, including the Adaptation for Smallholder Agriculture Programme (ASAP), help farmers in a variety of ways, from installing weather forecast systems, to introducing new drought-resistant crop varieties, as well as setting up farmer field schools where knowledge and new climate-smart agriculture techniques can be demonstrated and disseminated.