App boosts Amazon tree project

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Deforestation in the Amazon. Credit: flickr/ CC BY 2.0

A new app will help small-scale farmers grow trees and earn a living in deforested parts of the Amazon.

The app, called [AmazonPasto](), provides information about which species are useful in tree-based agriculture and grazing systems, and how best to grow them.

It also allows farmers to upload their tips and experiences, so others can learn from them.

Thousands of trees have already been planted as part of the project, run by local NGO Instituto Ouro Verde (IOV, Institute of Green Gold) and the University of Exeter.

"The app is a really exciting development that can potentially make a

huge difference to the ultimate reach of the project," said Professor Toby Pennington, of the Global Systems Institute and Department of Geography at the University of Exeter.

"The one piece of technology that is really widespread, even in rural parts of the Amazon, is the smart phone.

"By offering this information and—crucially—allowing farmers and researchers to add their own, these agricultural systems will constantly improve."

This cycle of improvement and growth reflects the project's aim to create a "positive tipping point" to improve the lives of economically poor Brazilians and the Amazon environment.

Some of the project's smallholder farmers were previously homeless, but their new silvopastoral systems (animals grazing among trees) produce crops and milk that can be sold for a fixed price to the Brazilian government for use in institutions including schools.

The project—which uses Inga trees to lock nitrogen into the soil and keep it fertile for the long term—also includes microcredit funding to help farmers get started.

About 60 hectares of silvopastoral systems have already been created—containing more 20,000 trees—and the project aims to increase this area by about 150 hectares per year.

"For IOV's team, this app is a great step forward in promoting sustainable and resilient agriculture systems in the Amazon," said Dr. Alexandre Olival, of IOV.

"Because of the app and our already successful systems, many small

farmers are looking for information or even planting new [trees](#) in their pastures.

"It could be a real advance for the entire region."

The app will be expanded for use in other areas next year, as IOV has received extra funding to add plants found in tropical dry forests, the Atlantic coastal rainforest and the pampas grasslands of southern Brazil.

To find out more about the [project](#), visit http://blogs.exeter.ac.uk/ingasystems/diversifyinginga/.

Provided by University of Exeter