Regrow Leads $5M Project “Niche” to Optimize Crop Variety Placement in Sub-Saharan Africa

4-year grant to fund sustainable agriculture partnership between Regrow, NASA Harvest, University of Nebraska-Lincoln and One Acre Fund


Regrow Logo

SAN FRANCISCO, CALIFORNIA, UNITED STATES OF AMERICA, December 2, 2021 /EINPresswire.com/ -- Regrow Ag is leading a project that aims to optimize crop variety placement in Sub-Saharan Africa. The project, which has been awarded a $5M, 4-year grant from the Bill & Melinda Gates Foundation, will bring together several key agriculture and climate tech partners to build an assessment framework and digital tools that will:

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>
> *Anastasia Volkova, PhD, CEO of Regrow*

1. Define and characterize the current and future performance of crop and variety adaptation zones in Sub-Saharan Africa, to advance the knowledge of seed breeders on climate adaptation in those specific zones

2. Identifies optimal variety placement for novel and existing crop varieties, so they can be effectively distributed to farmers

The framework, based on integration of remote sensing with crop modeling, will help seed developers understand the yield potential of certain cropping environments, given our changing climate and its anticipated effects on sub-Saharan Africa. The program will also optimize placement for specific crop varieties, based on the past performance of similar hybrid types. The project goal is to help seed developers in Sub-Saharan Africa establish more climate-adaptive crops, which are region-specific, and give supply chain distribution partners and producers insight into optimal placement for those varieties.

Regrow is leading the project with support from NASA Harvest, the University of Nebraska - Lincoln and an African-based nonprofit organization called One Acre Fund. NASA Harvest will support Regrow in crop and yield mapping, and The University of Nebraska - Lincoln’s

contribution to Global Yield Gap Atlas will bring to the project the knowledge of characterization of sub-Saharan crop production environments. One Acre Fund will provide on-the-ground insights, data and analysis. With this information, Regrow will integrate the data into an analytical framework built around Agricultural Production Systems Simulator (APSIM) hosted on the company's crop analytics platform, FluroSense.

Project "Niche" Underway

The resulting program, called Niche, is intended to provide breeders, seed companies and advisories with information to optimize seed development and placement in Sub-Saharan African countries. This will allow users to develop climatically adaptive seed varieties more precisely, and rapidly, thereby improving crop resilience in the face of changing weather conditions and other stressors related to climate change.

Data from the project will also be made available in open-access datasets in accordance with FAIR data practices to enable and enhance sustainable agriculture.

"We aim to provide access to data-driven decision making tools promoting the adoption of climate-smart agriculture in the communities that need it the most," said Anastasia Volkova, PhD, CEO and Co-founder of Regrow, "Not only will we be able to help breeders to optimize future crop varieties and build climate resilience, but we'll build the body of knowledge and open-access datasets that will help further research on climate adaptation and resilience ."

Stay tuned — we'll share more information about the Niche project on our blog (www.regrow.ag) and through our newsletter.

Learn more about our partners:
NASA Harvest
University of Nebraska - Lincoln's Global Yield Gap Atlas
One Acre Fund

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ABOUT REGROW
Regrow is a software company that provides a sustainable transformation across the agrifood supply chain. Regrow delivers scalable, science-based solutions for adoption, measurement, reporting and verification (MRV) of ecosystem outcomes, such as soil carbon, nitrogen leaching,

among others. Regrow monitors over 150 million acres of agricultural land in 45 countries.

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