

Helping farmers increase crop yield, save water and maximize profits

☒ PITCH VIDEO ☐ INVESTOR PANEL



groguru.com

San Diego CA



Software

Food



Technology

Clean Tech

Agriculture

Highlights

- 1 🤖 Cutting edge Artificial Intelligence & Software as a Service platform - 1st season payback period
- 2 🌍 Global Impact - Significant Water Savings and Increased Food Security from crop yield increases
- 3 💰 GroGuru stands out in the global agriculture industry, which generates \$2.4 trillion annually
- 4 🚜 Patented technology - 30x improvement in scalability - 30% water efficiency improvement
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- 5 🇺🇸 4,000+ sensors deployed across 200+ customers in the US
- 6 😊 Existing customers represent 1 million deployable acres and a dealer footprint of 5 million acres

- 7  Team brings extensive technical and domain expertise in wireless, AI, SaaS and crop science
 - 8  Founder ran 4 startups with multiple exits, including an IPO that led to a \$1 billion valuation
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Our Team



Patrick Henry President & CEO

Ran 4 startups with multiple exits. As CEO of Entropic, he took the company from pre-revenue through successful IPO and a \$1B valuation.



Farooq Anjum, PhD VP of Engineering & CTO

20+ years experience building complex systems. Designed wireless networks in 30+ countries. Published 60+ papers, wrote 2 books, and awarded 15 patents. Ph.D. in Electrical and Computer Engineering from University of Maryland College Park.



Jeff Campbell, PhD Chief Scientific Officer

Inventor of 19 patents from various soil sensors and the Stevens Hydraprobe. Ph.D. in physics from Dartmouth College.



David Sloane, PhD Chief Agronomist

20 years of experience in irrigation agronomy. Ph.D. in Agronomy from University of Adelaide in Australia.



Vince Ferrante VP Sales

20 years of experience selling complex system solutions products. Founded Martek, a rep company that he sold Ewing Foley.



Regan Lohman

The GroGuru Story - Helping Farmers and Creating a More Sustainable Planet

GroGuru provides a software as a service for strategic water management - assisting farmers in sustainable crop monitoring that saves them water, resources, and of course, extra work. Deploying over 4,000 soil sensors across over 20 crop types in the United States, GroGuru acquired \$620K in revenue in 2020 alone - a huge success in a very difficult economic environment.

Meet GroGuru® : The Future of Sustainable Farming

As complicated as humans are, we have two very basic essential needs: food and water. And as we know, those vital resources are being threatened due to climate change and a growing population.

We think the best way to make things better is to start from the ground up - and that's why we help farmers.

STRATEGIC WATER MANAGEMENT

GroGuru® helps farmers make more money by increasing crop yield while saving water and other scarce resources in a sustainable way.

Using AI technology, our water management through soil monitoring assists farmers in growing more food, and saving more water.

We think the planet deserves a smart farm.

Introducing: Real-Time Data Tracking



A Partnership That Connects You
to Valuable Real-Time Data

GroGuru is continuing to stand out in the agriculture industry by signing an API access agreement with Valley Irrigation, A Valmont Company, which provides farmers with the opportunity to understand data in real-time. These devices are able to track center pivot irrigation systems, soil monitoring sites as well as weather stations which would ultimately improve crops like corn, cotton, wheat and other cereal crops. The future of this partnership is expected to bring a benefit to farmers by increasing efficiency of irrigation systems as well as being mindful of sustainability.



Member
United Nations
Global Compact

The Problem



Too Many People, Not Enough Food and Water

Let's look at the big picture: We have a global problem of catastrophic proportions where we simply cannot meet the basic needs of many people. And with more people every day comes more challenges.



UNDERNOURISHMENT

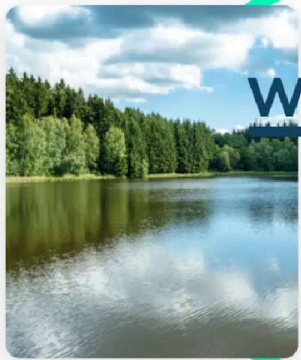
800M

CHRONICALLY UNDERNOURISHED
PEOPLE GLOBALLY TODAY

PRODUCTION SUPPLY

70%

INCREASE NEEDED IN GLOBAL
FOOD PRODUCTION BY 2050



WATER MISUSE

70%

OF GLOBAL FRESHWATER IS USED
FOR AGRICULTURAL IRRIGATION

Not to mention, farming is hard. Farmers typically run into problems with...



Water



Soil Health



Weather &



Regulation



Input Costs

Commodity
Pricing

Farm Labor

We believe soil monitoring for optimal water management is necessary to yield enough crops to feed our planet, but farmers tend to struggle with making practical irrigation choices. And although soil monitoring methods are out there, they tend to have some problems of their own.

SOIL MONITORING METHODS HAVE:

High Total Cost
of Ownership

Scalability Issues

Sub-Optimal
Yield
ImprovementInsufficient Data
Continuity for AI

Plus, water management is primarily about the management of the root zone of the crop. The tools needed to do this prior to GroGuru were only a partial answer to this massive problem.

The GroGuru Solution...



Yielding Farmers More Crops and More Money

Our mission is to help farmers make more money by increasing crop yields and more efficiently using water and other scarce resources like labor, energy and fertilizer in a more sustainable way.

We do this by providing superior decision support tools to farmers and agronomic consultants for strategic water management.



Cost-Effective

Affordable solution that pays for itself in one growing season



Scalable

Permanent installation solution with **30X** more scalability than competitors



↑ Crop Yield

10 - 20% increased crop yield as a starting point



Labor Saving

Unlike competitors, GroGuru does NOT require annual replacement

Crops get fed water and nutrients through the root zone of the crop, inspiring us to monitor from the root zone up.

IT'S ALL ABOUT THE ROOTS

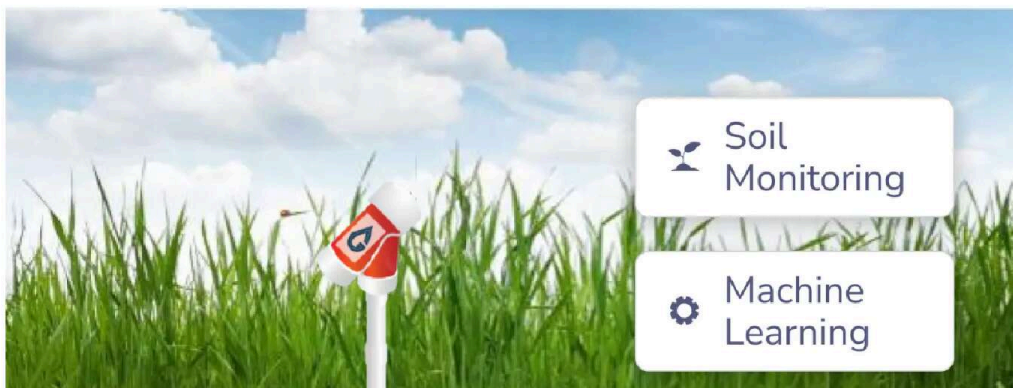
Optimal irrigation has the single biggest impact on crop yield and crop quality by creating a robust root system. That's why we monitor from the root zone up with:



Soil Monitoring



Machine Learning





With these methods, we provide an enhanced data set combined with other data like rainfall, applied irrigation, weather forecast and crop models to give farmers additional insights about how to optimally manage water usage out in their fields irrigation.

In short, we enable farmers to better irrigate their crops - making more money while they're at it, and acting more sustainably while they're at it, too.

THE GroGuru SOLUTION



Communicates without cables via our proprietary wireless underground system



Conveniently transmits the data to the cloud



Uses AI to interpret data and provide valuable irrigation insights



Is easy to install and intuitive to use



Incorporates proprietary technology with 4 issued patents and 5 patents pending

A Trillion Dollar Market

If you fly over Kansas or Nebraska, this is what you will see: millions of acres of irrigated farmland. If that seems like a lot, it's because it is. After all, the global agriculture market is \$2.4 trillion annually. And the market for soil moisture monitoring is best looked at from an acreage standpoint.

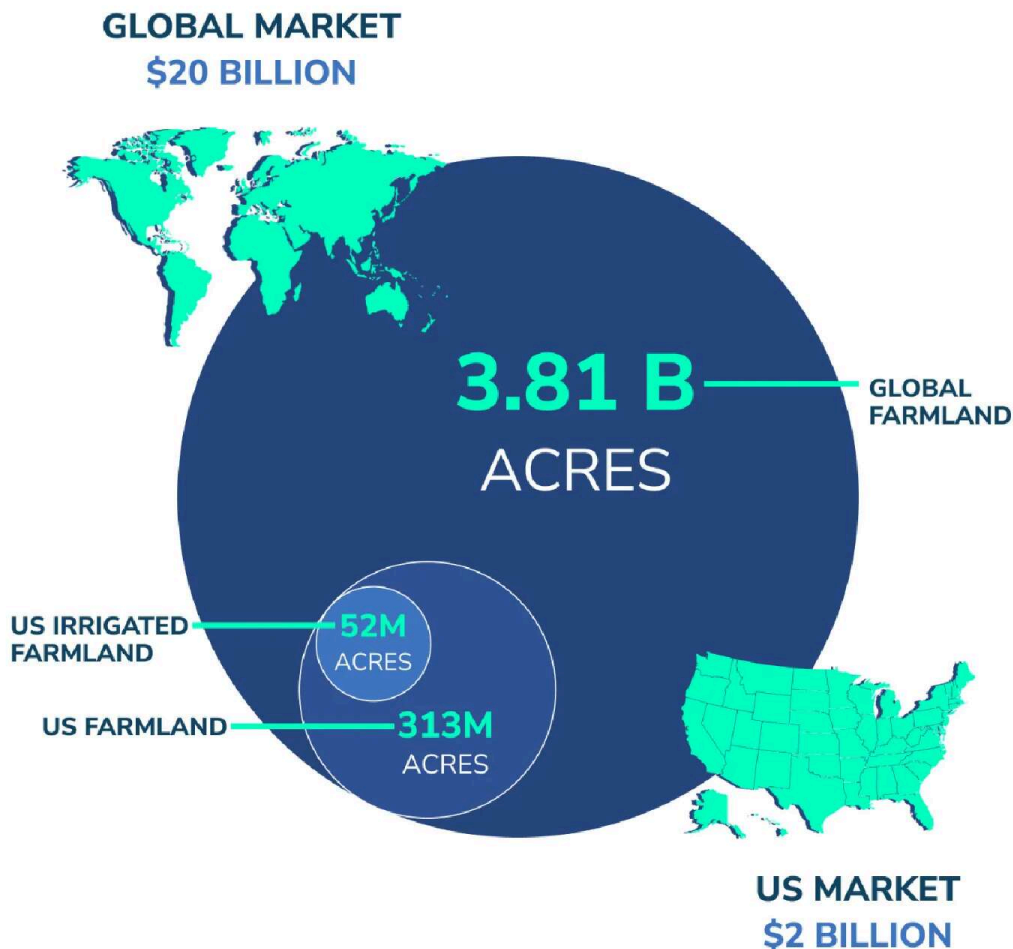
According to the USDA, there are 52 million irrigated acres in the US, of which 44 million acres is annual field crops like corn, soybean, cotton, wheat, sorghum, and alfalfa.

There are 313 million total farming acres in the US and 4.2 billion acres globally.

So assuming...

- Reasonable priced reductions over time
- Reasonable deployment assumptions of solid sensors based on GroGuru's modeling

The market, at full penetration, is \$2 billion annually in the US and \$20 billion globally.



Covering a Lot of Ground

Since our beginning, we've...

- Deployed over 4,000 sensors across over 20 crop types in various geographies in the United States.
- Established a dealer footprint that represents 6 million deployable acres.
- Achieved \$620K in revenue in 2020 in a very difficult economic environment where a number of our competitors went bankrupt or were sold.

GroGuru DEPLOYMENTS



We are now on our third generation of software as service (SaaS) and our third generation of internet of things (IoT) for farming products. We have formed key strategic partnerships with market leaders in the precision agriculture space, and have many more in the queue eager to work with us.

AFFILIATIONS

