Digital Literacy for Small to Mid-Sized Farms

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Introduction

A gap is growing between the technological resources available to agricultural producers and the utilization of these resources. Knowledge of hardware, software, and connectivity is necessary to fully understand the benefits of on-farm technologies. Small to medium sized farms make up a majority of the total farms in Georgia and these producers are typically in an age bracket that has not received formal training on current technology.

Objective

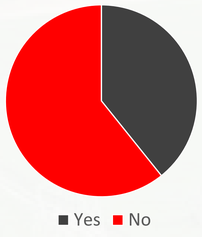
The objective of this project is to evaluate the technological literacy of small to mid-sized farms, build an example dataset using current technology, and develop training material to increase adoption of on farm technology.

Materials and Methods

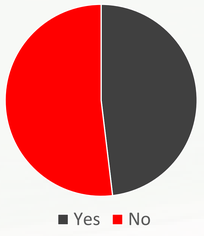
- Survey data collection began during the summer of 2022 by UGA.
  - 81 responses received.
- 2017 USDA NASS 2017 Census for Agriculture suvery data used for comparison.
- Example data collection began on the ABAC DATA Farm in September of 2022 by ABAC's Precision Ag Technician.
  - ABAC's Demonstrating Applied Technology in Agriculture(DATA) Farm is a 90-acre row crop and forage operation in Tifton located near campus .
  - Data Collected:
    - Weekly Drone Flights
    - Veris Soil EC Maps
    - Soil Test Results
    - Dry / Liquid Applications
    - Planting Data
    - Harvest Data (Fall 2023)
- Website planning and development using a Google Workspace account.
  - Google Sites used for website design as a wiki style page with linked tutorials.
  - Google Drive used for central data storage.
- Training modules translated into Spanish

Survey Results

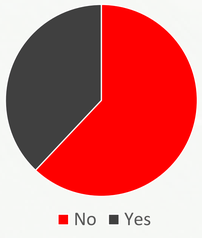
Do you use computer software to help manage your farm?



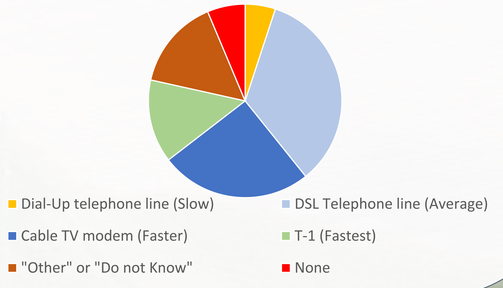
Do you use a physical ledger for organizing your farm management?



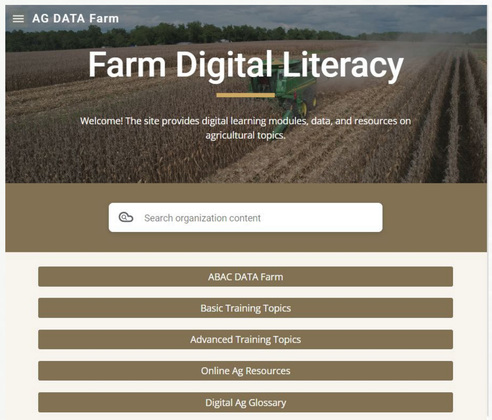
Do you use phone apps to assist with farm management?



What kind(s) of Internet Connection do you have?



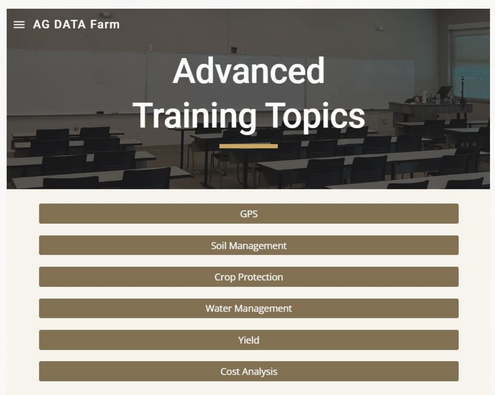
Training Modules



Home page of the website where users can access areas of the project: DATA Farm information, Basic Training Topics, Advanced Training Topics, a glossary of digital agriculture terminology, and a centralized list of agriculture resources available online.

Basic training topics hub where users can access the training modules. The modules will include a narrated video along with a wiki style page for the topic with embedded links to further information on the topic in the glossary or an advanced training module.

Landing page for users to access information collected from ABAC's DATA Farm. Data is continually collected from the farm and processed into information that users can view as an example what on-farm data looks like and how it can be relevant.



Advanced training topics hub where users can access the advanced training modules in the future. This is also where specific topics will be included for more in depth training.

USDA NASS 2017

Total Farms in GA: 42,439
Total Acreage in GA: 9,953,730

Under 259 acres:

- Quantity: 34,343
- Portion of Land: 23%
- 81% of total farms
- 26,005 or 76% have internet
  - 40% have DSL
  - 37% have mobile internet

Future Work

Phase II:

- In person training events.
- Development of advanced training topics.
- Continuous collection of on farm data and updates to web site.

UAV map of the ABAC DATA Farm captured on 05/10/2023

Acknowledgments

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