Type: Graduate Student Paper Competition

Creating Open Access Agricultural Maps and Ground truth Data to Better Deliver Farm Extension Services

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Abstract

The Enabling Crop Analytics at Scale (ECAAS) project aims to produce open-access agricultural maps and ground truth data to enhance the delivery of farm extension services. It creates high-resolution maps of the various crop types and the potential yields relating to them using this data. These maps are used to identify potential production improvement areas and provide farmers with more accurate information. The project uses satellite imagery and ground-based data to monitor crops.

By creating accurate and up-to-date maps of agricultural land, farmers can learn more about their lands and the resources they have available to them. Ground truth data, such as crop yields and soil types, are also used to better understand farmers' preferences and determine how to best meet those needs. Farm extension services may be customized to the specific needs of individual farmers using open-access agricultural maps and ground truth data. High-resolution maps that emphasize areas with the potential for improved agricultural production are created using a complete approach that combines drone technology, remote sensing, and GIS.

Ground truth data is also essential to provide reliable information on the land and its resources. It enhances our understanding of the existing state of the land and its resources, enabling the development of more beneficial farm extension services. The generation of open-access agricultural maps and the acquisition of real-world data allow farmers to obtain more precise and efficient farm extension services.

Keywords: Open-access agricultural maps, ground truth data, extension services

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