Epsilon AI

CDSP ML , AI and DL

Mid Project

Class : CDSP DSOFF28723M Fri.[10-4] Eng. Ahmed Ayman

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Digital Green Crop Yield Estimate Challenge

Presented by :
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Problem statement :

Smallholder farmers are crucial contributors to global food production, and in India often suffer most from poverty and malnutrition. These farmers face challenges such as limited access to modern agriculture, unpredictable weather, and resource constraints. To tackle this issue, Digital Green collected data via surveys, offering insights into farming practices, environmental conditions, and crop yields.

The objective :

- Create a machine learning solution to predict the crop yield per acre of rice or wheat crops in India. Our goal is to empower these farmers and break the cycle of poverty and malnutrition.
- A crop yield model could revolutionize Indian agriculture, and serve as a global model for smallholder farmers. Accurate yield predictions empower smallholder farmers to make informed planting and resource allocation decisions, reducing poverty and malnutrition and improving food security. As climate change intensifies, adaptive farming practices become crucial, making precise yield predictions even more valuable. Solutions developed here can drive sustainable agriculture and ensure a stable food supply for the world's growing population. This challenge offers data scientists and machine learning enthusiasts a unique chance to make a real difference in vulnerable populations' lives while advancing global food security in a concise, impactful way.

The Data :

- The data was collected through a survey conducted across multiple districts in India by Digital Green .

- Digital Green is a global development organization that empowers smallholder farmers to lift themselves out of poverty by harnessing the collective power of technology and grassroots-level partnerships.

It consists of a variety of factors that could potentially impact the yield of rice crops.

Workfollow description: