

**LISTENFIELD**

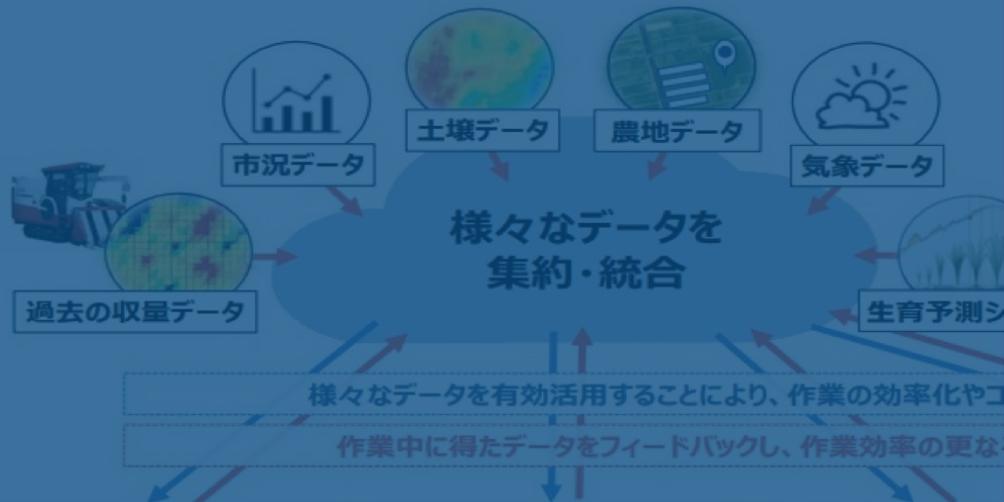
# Machine Vision technologies

Increase crop yield for farmers and regenerate our planet

# データを活用した農業の将来像



農業現場における生産性を飛躍的に高めるためには、データを



・ 営農形態に応じた最適な作業計画

⇒ 作業効率や収益を最大化



作業計画の策定

・ 農作業の自動化

⇒ 作業効率を大幅に向上



耕起・播種・移植

・ スマホでの生育管理

⇒ 作業時間やコスト削減  
⇒ 資材コスト削減



生育管理

## [from Thesis to Agricultural Reform Policy]

For a regional economic boost

Aggressive strategy in agriculture is required to enhance the sustainability of the whole value chain.

Need to reform agriculture based on actionable data.

Need to launch agriculture data platform – API.

Making use of open data sources. Accelerate actual implementation to the society. Achievements in practical use and dissemination.

ListenField Co., Ltd. started providing services in Japan and Thailand and is working together with multiple companies.

Kubota



## Agricultural Innovation Grand Prize

“an integrated API platform that includes data analysis functions (**field sensor integration, weather analysis, growth simulation, satellite data processing**) (that) deserves the Excellence Award (new technology field) as a practical activity for agricultural innovation.”



# Value creation in Japan is 8.5 times that of Thailand



Farmland 221,100 sq.km.

Create value 2.9 หมื่นล้าน USD

1 hectare creates 1,274 USD



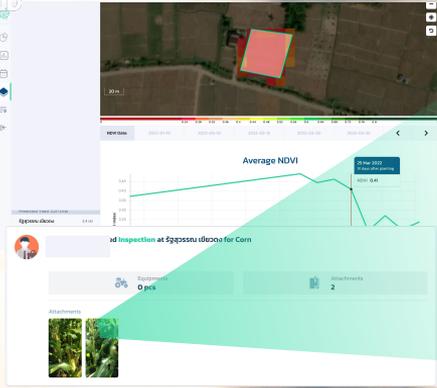
Farmland 44,200 ไร่.น.

Create value 4.8 แสนล้าน USD

พื้นที่ 1 hectare creates 10,860 USD



TENFIELD



# Precision Agriculture

Precision to enhance productivity

[AI | Multispectral Vision]



Precision to breed sustainable seeds

[Genomic Selection]



# From farm to factory

## สู่การลด waste





[Genomic Selection]

Precision ในการพัฒนาสายพันธุ์

AI and DNA Sequencing

Data Driven Breeding

▼ Rice Breeding Pro...

rice\_flowering\_time\_arkansas

overview result

Project Overview

Project Files

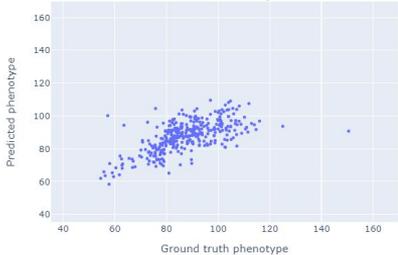
Models

Predictions

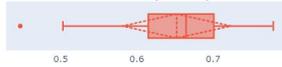
GWAS

rrBLUP (I2\_coef= 74.426)

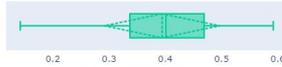
Prediction scatter plot



Correlation (Pearson)

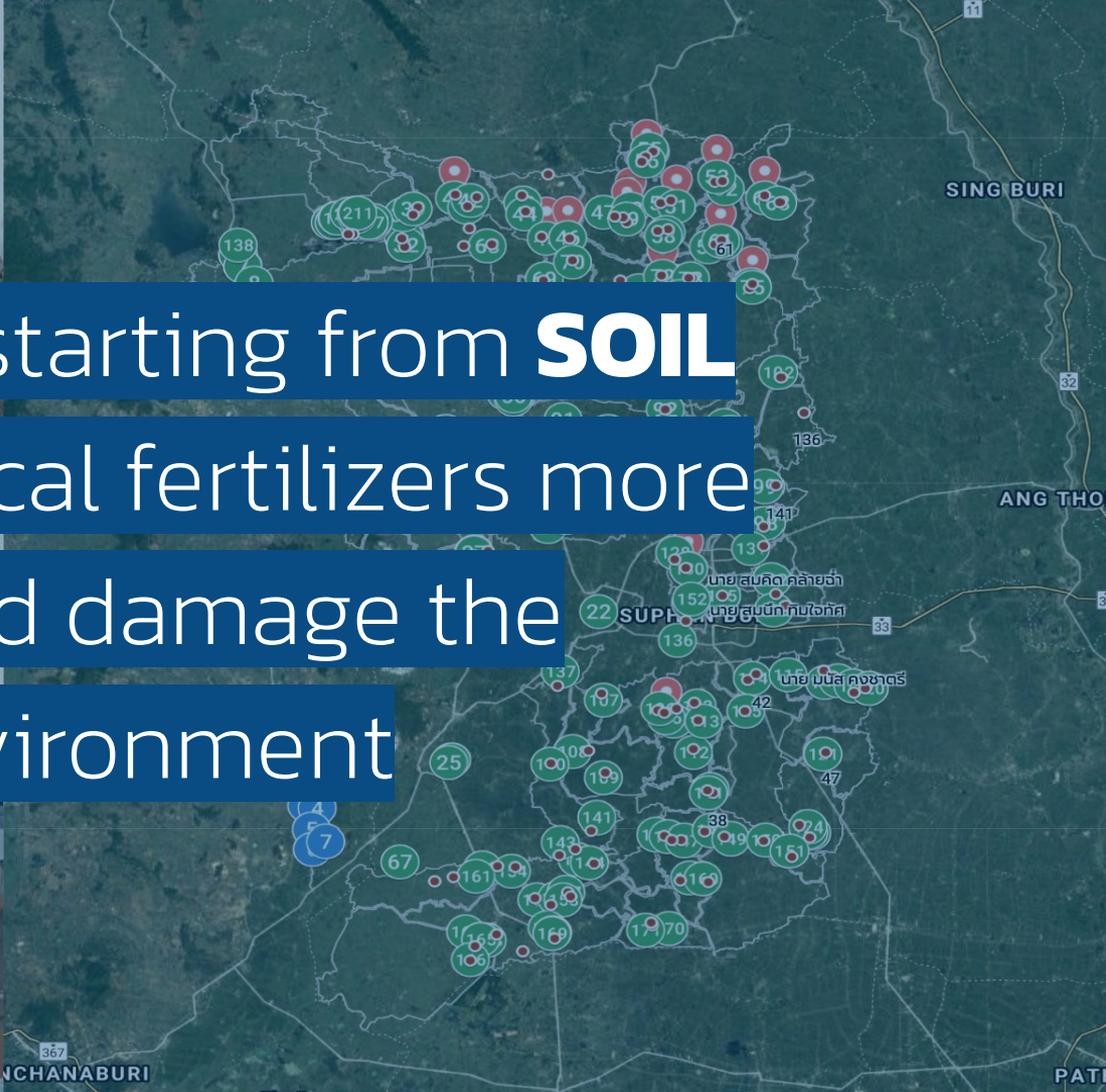


R2 score



Mean Squared Error





Farming is starting from **SOIL**  
More chemical fertilizers more  
cost and damage the  
environment



# Regenerative Farming & Carbon Footprint

จากการเน้นใช้สารเคมี  
สู่การฟื้นฟูสภาวะแวดล้อมและดิน



LISTENFIELD

“Make farming productive,  
optimizing the use of  
resources to help  
regenerate our planet”