



# Syngenta Group creates long-term, sustainable value for farmers everywhere



With our HQ in Basel, Switzerland, Syngenta Group is a leading sustainable agricultural innovation and technology company. We embrace the diversity of our teams and expertise in more than 100 countries to deliver the broadest range of products and services for the benefit of farmers, society and our planet.

# #1

in Crop Protection  
and Biologicals

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# #3

in Seeds

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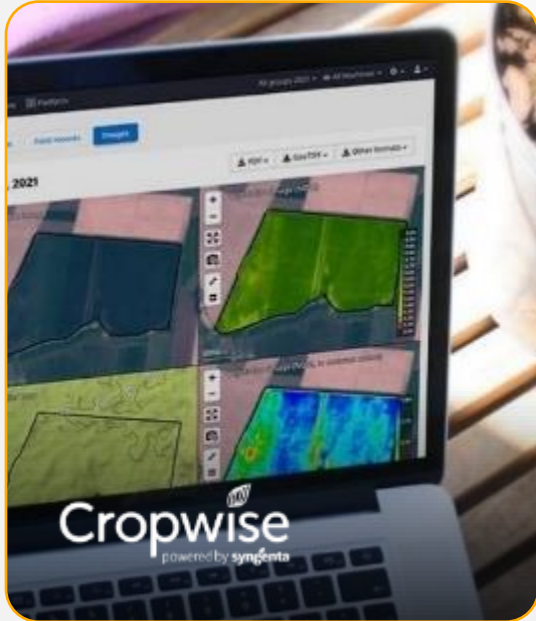
# #1

in crop nutrition  
and farmer  
services in China

# One of the global challenges is to feed a growing population with the same amount of land and resources available



# We seek and move into new areas that help make farmers even more successful



## Digital platform

All-in-one digital farming solution with leading position in every region



## Unique seed placement tool

Optimizing seed selection and placement



## Precision farming

Driving increased productivity and sustainability through targeted application

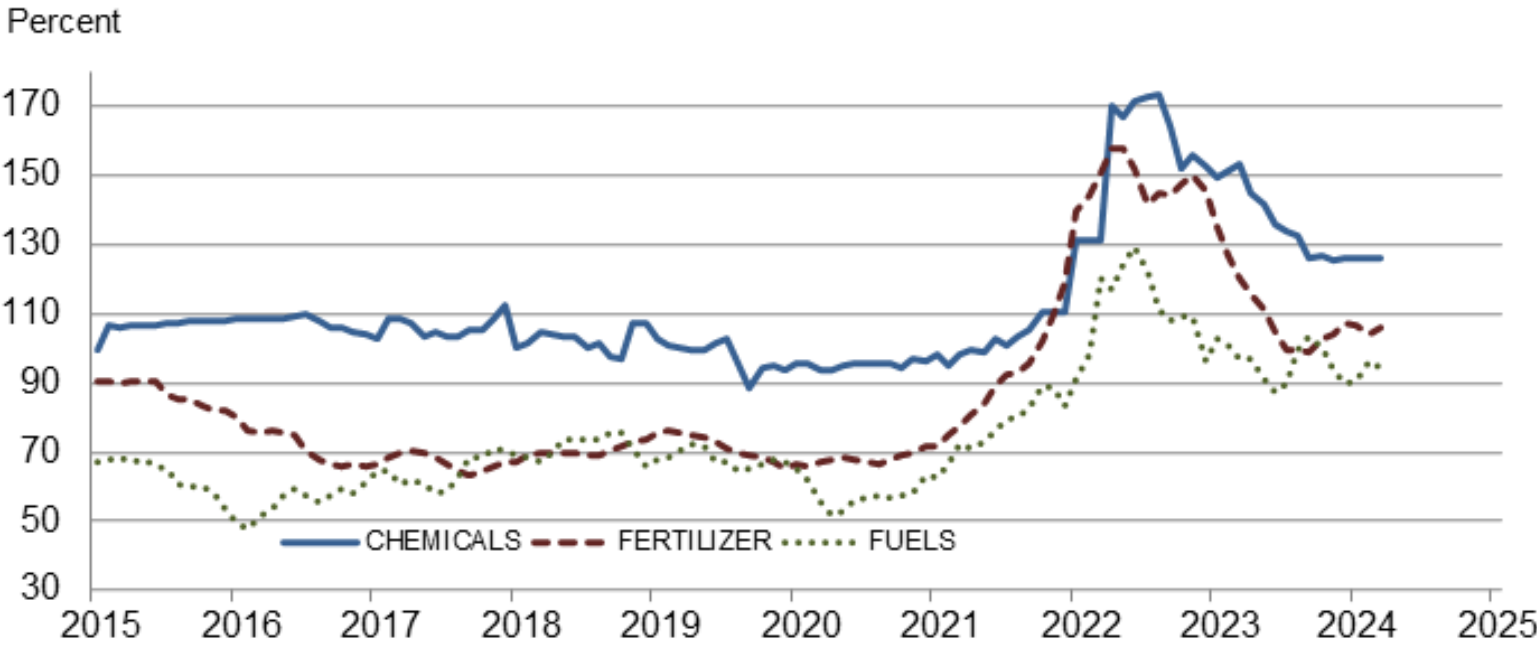


## Innovative distribution services

Growing direct sales networks

# Agricultural Input Costs Remain High...

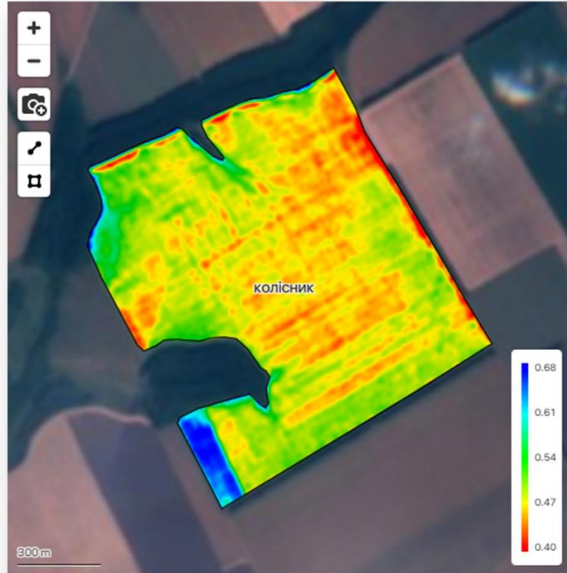
**Paid Indexes by Non-farm Origin and Month,  
Chemicals, Fertilizer, and Fuels –  
United States: 2011=100**



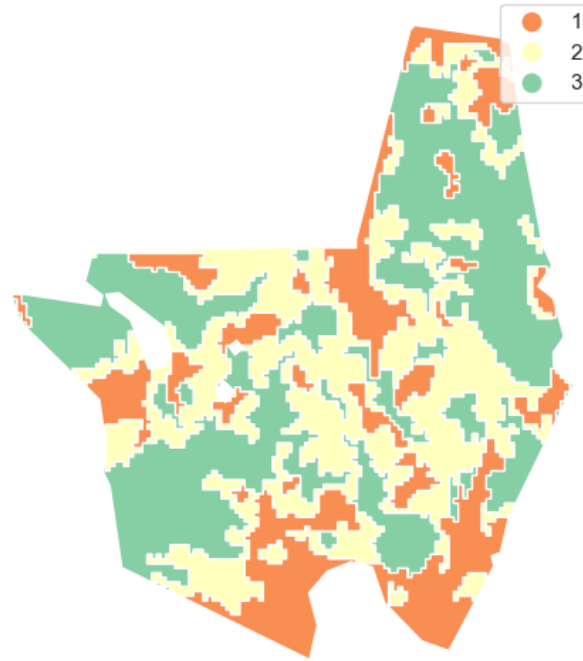
USDA – NASS  
4/30/2024

# Variable Rate Application – Tailoring Inputs to Productivity

NDVI Map from Satellite Imagery



Farmers Knowledge of the Field



Zone Creation for Variable Rate



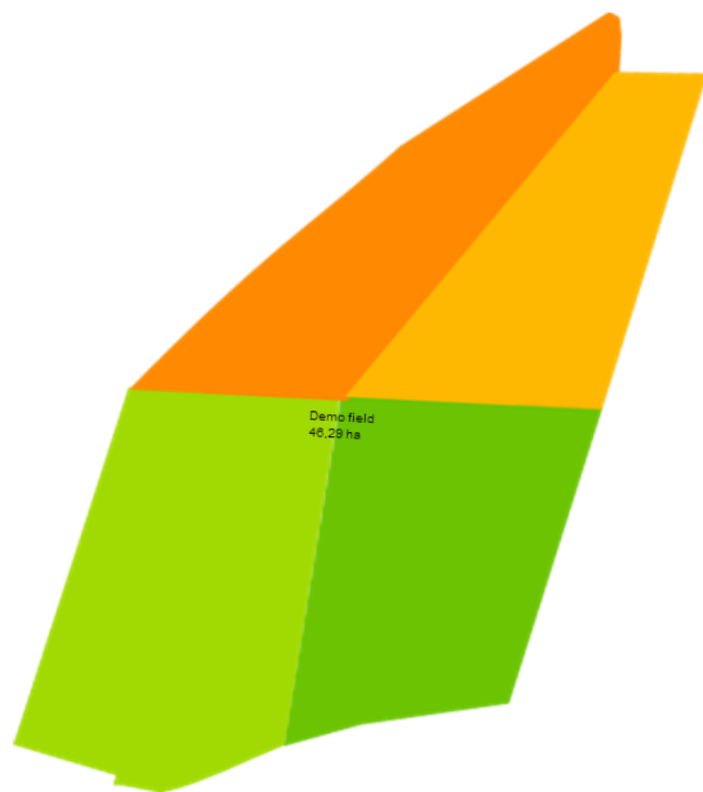
Upload to Tractor Monitor

# Advanced Sensing Technology to Measure Soil Health

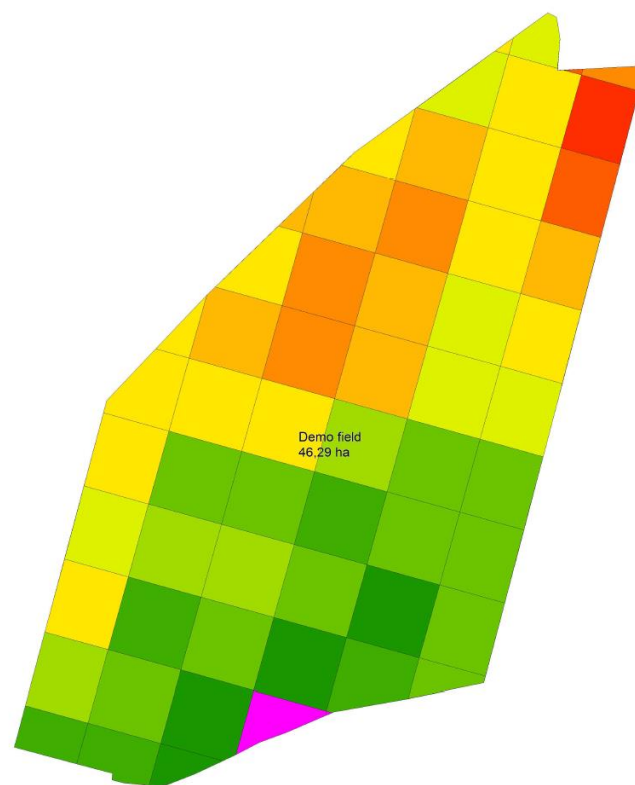
- INTERRA® Scan allows growers to understand the texture, nutrient and carbon content of their soils in order to optimize nutrition and carbon capture.
- High-resolution maps – up to 27 layers of information – 800 data points per hectare
- Enables the grower to understand exactly what to apply, where and how much to improve overall soil health



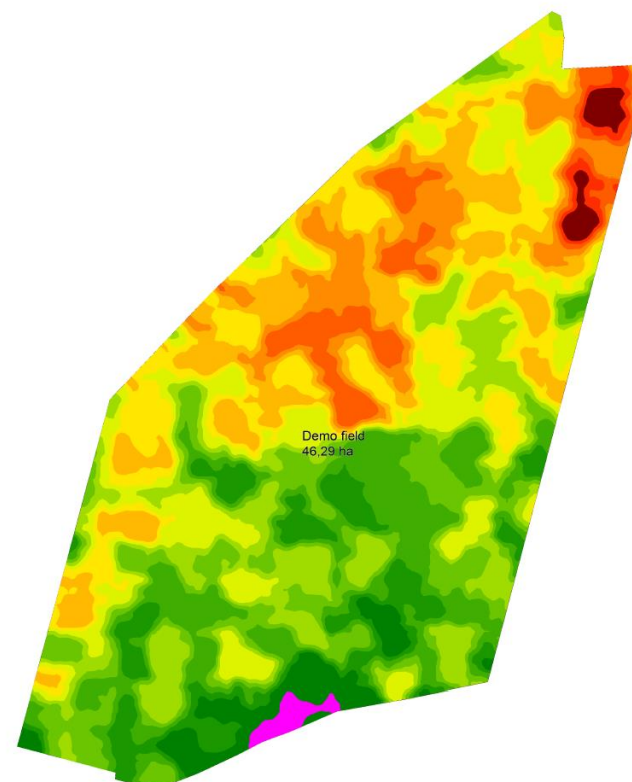
# Interra Scan Provides a much Higher Resolution that Conventional Soil Health Measurement Methods...



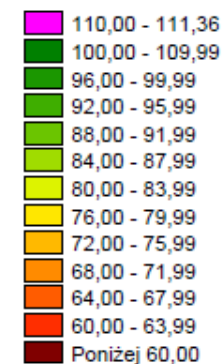
Zonal sampling



1ha grid sampling



InterraScan



Potassium  
K/mg/1000g



# INTERRA®Scan Value proposition

**INTERRA®Scan**  
can pay for itself  
in 1 year

- ✓ Yield advantages through variable rate planting:
    - Potatoes € 150/ha
    - Onions € 150/ha
    - Sugar beet € 100/ha
    - Wheat & barley € 100/ha
  - ✓ Yield advantage from variable rate fertilizer:
    - ✓ VR phosphate in wheat and barley € 160/ha
    - ✓ VR phosphate in potatoes and onions 5 – 10% yield increase
  - ✓ Yield advantage from variable rate herbicide onions € 100/ha
- Additional benefits achieved with INTERRA®Scan**
- ✓ Target liming delivering a cost saving between 10 – 30%
  - ✓ Facilitate access to subsidy funding
  - ✓ Irrigation optimisation yield and cost saving benefits
  - ✓ Variable rate organic fertiliser application

Validated via multiple published papers on variable rate application

# Cropwise Planting Service gives you greater flexibility in tackling in-field variability

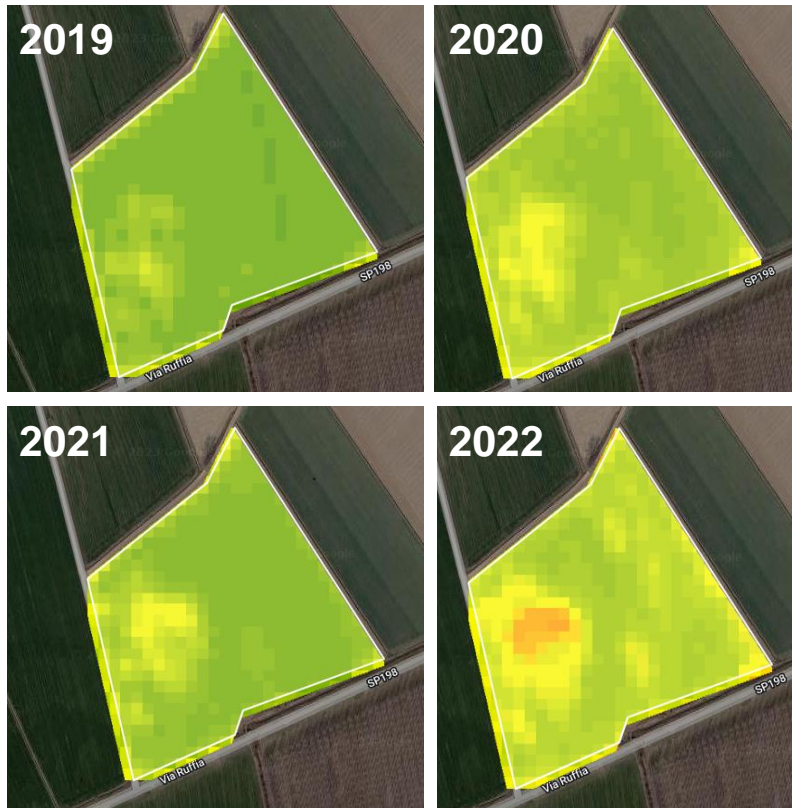


Different Dry Down, Yield and Quality due to shift in Soil Texture and Fertility



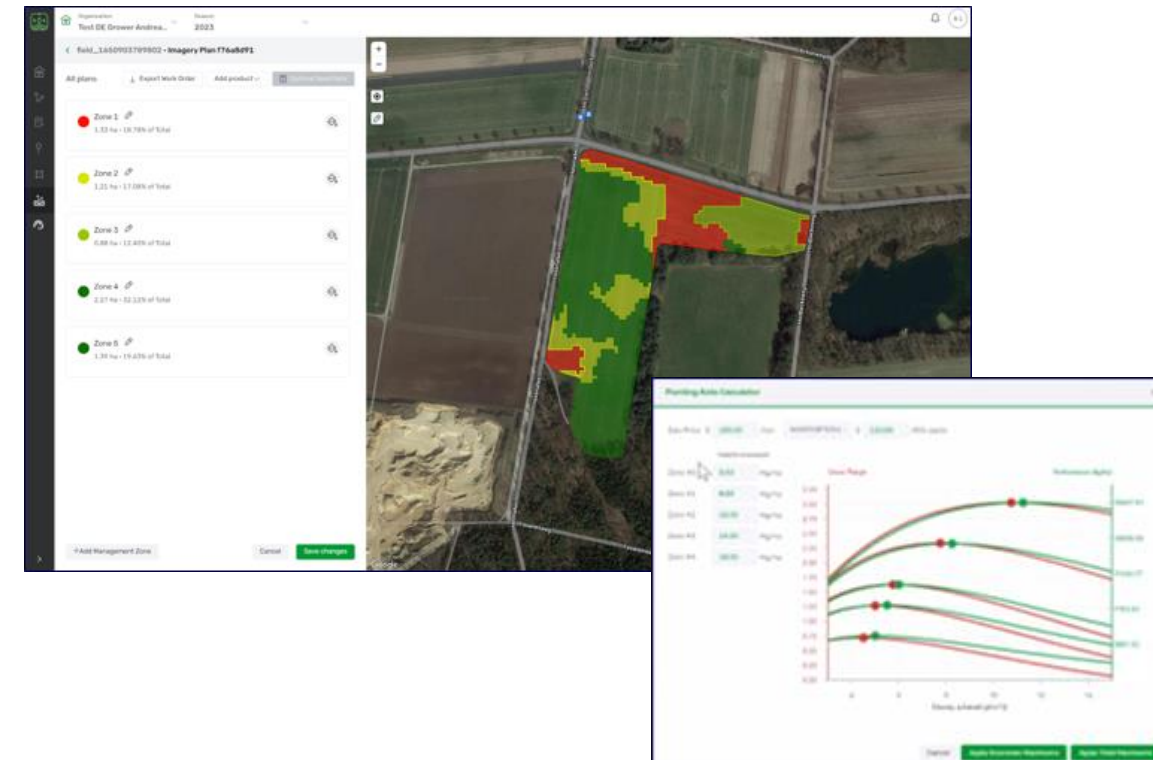
# Productivity Zones Dictate Seed Rate

## Multiple Year Analysis of Satellite Data



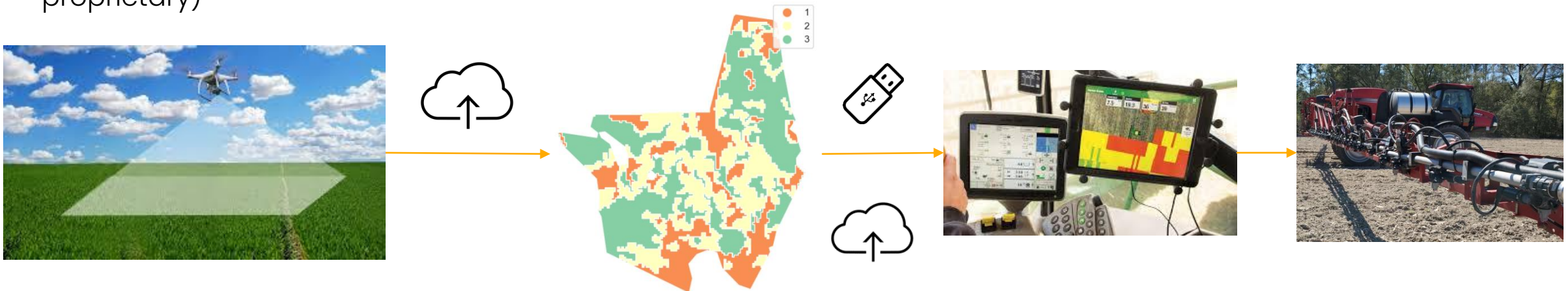
We have developed an “Autozoning” algorithm, that selects, cleans and processes the Satellite data.

## Aggregated Zones with different Productivity Levels



# Maps, Sticks, Wireless and Machines – the Landscape is not Easy for the Farmer

- Precision farming is not easy:
  - Multiple data gathering devices
  - Multiple farm platforms
  - Complicated to upload maps to monitors
  - Monitors must connect with resulting application hardware
- The farmer just wants it to work! Adoption is hampered by a lack of time from farmers to work out how to overcome the obstacles – especially in smaller enterprises
- More collaboration is needed between agriculture and other sectors to find common solutions (that are not proprietary)





Helping farmers feed the world with safe, nutritious and tasty food

