

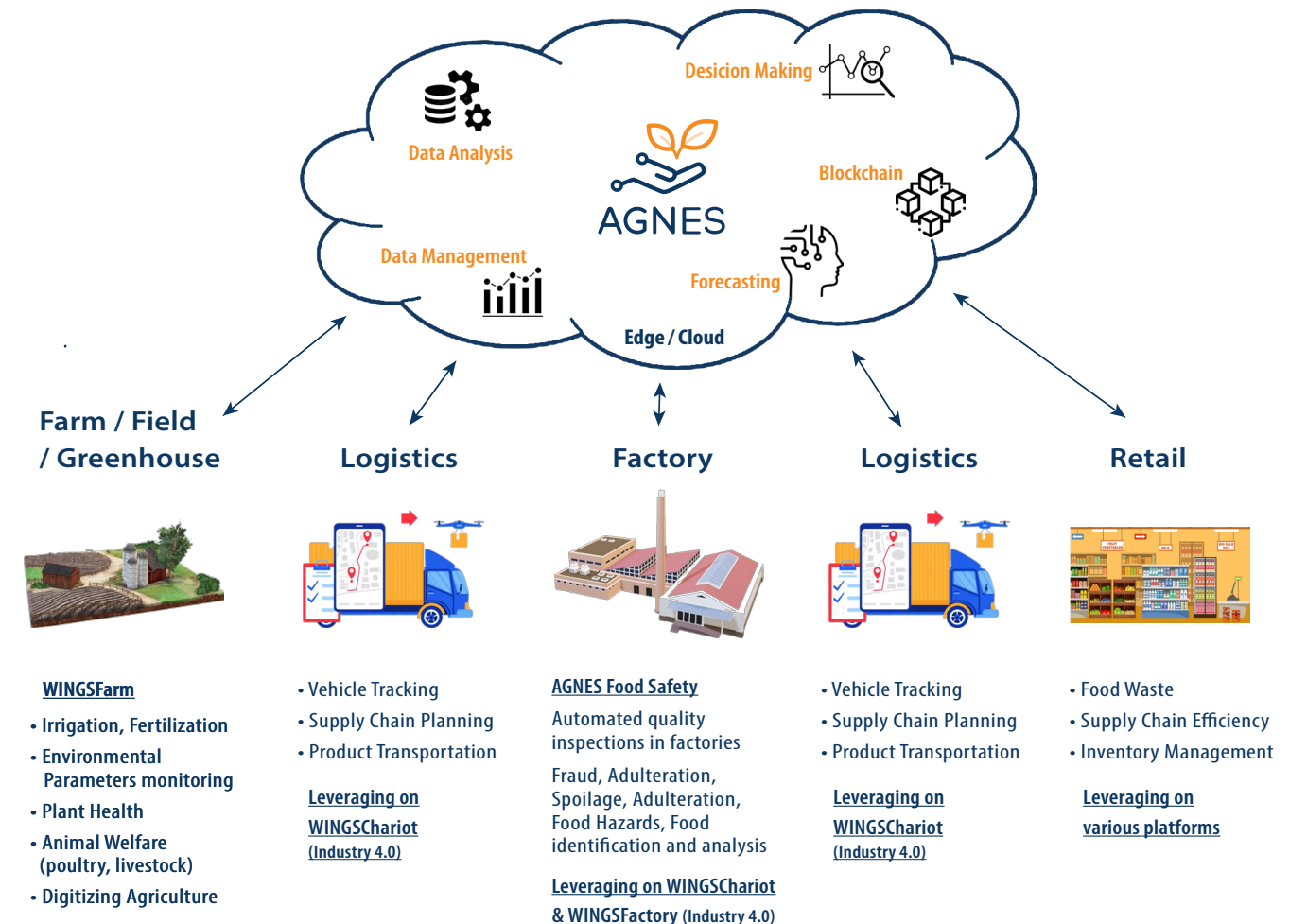


## Our Expertise

We build innovative solutions based on our expertise in high tech areas:

- IoT / Edge Intelligence
- Networks (4G, 5G, B5G, Wi-Fi, LoRa), Core Cloud, Big Data
- AI / Trustworthy AI / Cybersecurity
- Visualization: web / mobile / XR

Expertise



WINGS exploits Advanced Technologies to deliver Digital Solutions for Air Quality and Natural Environment Protection (AIRWINGS), Utilities (ARTEMIS), Transportation Infrastructures (WINGSPARK), Aquaculture (AQUAWINGS), Agriculture (AGNES), Industry 4.0 / 5.0 / Industrial IoT / Logistics (WINGSChariot), Health and Wellness (STARLIT).

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Our

Technologies for **PRIMARY SECTOR**  
 to Unleash Productivity, Resilience  
 & Sustainability

WINGS Solutions for Primary Sector

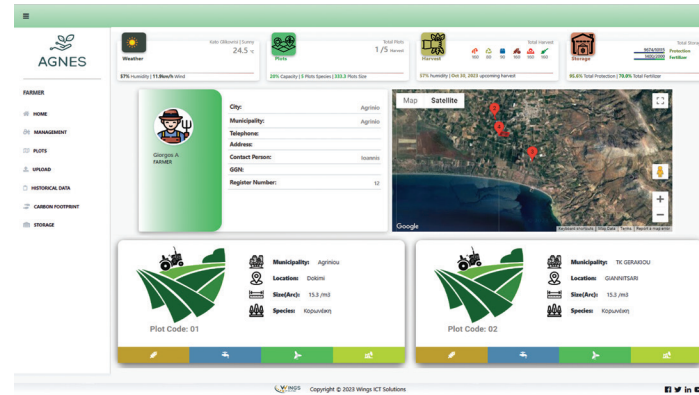
# Increase Production Rate with Integrated Technologies



## • Digitizing Agriculture

Farmers have been growing food for generations without using farm management software. But in today's fast-paced and highly competitive food production landscape and on the front line of Climate Change, farm management software is critical to success.

WINGSFarm software program leads to reduced expenses, increased yields, better yield quality, higher profitability and lower operational risk.



### Applies to:

1- Streamline agricultural processes and maximize efficiency with state of -the-art digital tools:

- Soil sampling Data
- Farming operations
- Nutrient application
- Nutrient application
- Farming operations
- Nutrient application
- Irrigation application
- Water consumption
- Plant protection products application

2- Monitor, analyze, and improve environmental impact to create a greener, more sustainable future.

- Nutrient balance
- Carbon Footprint
- Legal limits and requirements

## • Smart Poultry/Livestock Farming

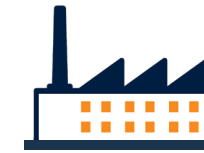
WINGSFarm provides enhanced monitoring and management of operations and production planning for poultry/livestock farming. Delivers the necessary innovations for sustainable poultry/livestock farms: poultry/livestock behavior analysis, poultry/livestock average weight estimation, intelligent feeding, and environmental analytics. Farmers have complete control and actionable insights over their farm.



### Benefits

- Improved efficiency
- Improved Animal Welfare
- Reduced Labor costs
- Real-time monitoring of the farm 24/7

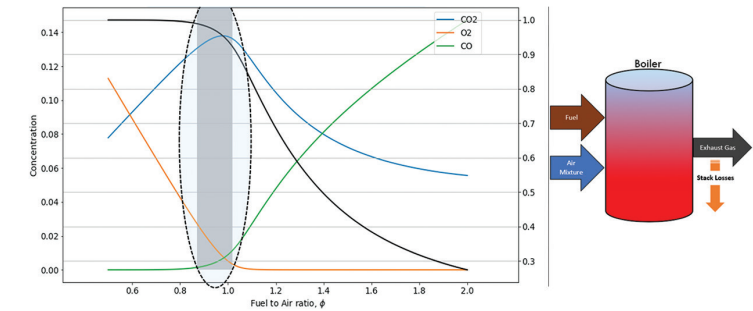
# Factory leveraging on WINGSChariot & WINGSFactory (Industry 4.0)



## Optimization for Food Processing sites

WINGSFactory / WINGSChariot provide optimizations for Food Processing sites, leveraging on advanced metering algorithms, fault management schemes, and advanced optimization mechanisms.

- Robotics , Automatic Optical Inspection, context (sensing, localization, maps), optimizations (route, storage, resources), digital twins.
- Quality Assurance - System of sensors and/or visual media (camera) to inspect and detect quality issues in real time in Food Processing sites.



- Predictive Maintenance - Advanced Analytics and Machine Learning which automatically generate information about the situation of the machinery and their maintenance needs.
- Optimization of energy efficiency, carbon footprint minimization, resource use optimization



# AGNES

Food Safety Devices

## Device which applies in all steps of the value chain to inspect and detect quality issues in real time

- Incorporates spectroscopy technologies, advanced communication protocols (4G/5G), analysis models and artificial intelligence.
- Offers a comprehensive food quality and safety control service to both retail and industrial users, tailored to their needs and requirements.

### Benefits

- Portability
- Modular design and expandability with different spectrometers
- Detection time (< 2 min)
- Artificial intelligence for better accuracy
- Reduce operational costs for users

