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TECHNOLOGY TO ELEVATE YOUR BUSINESS

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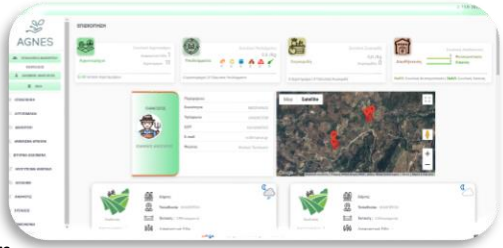
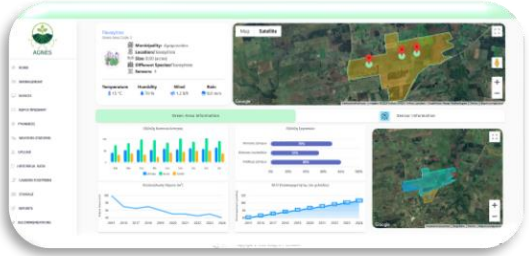
A. AGRICULTURE : Farmbook (Farmers, agricultural cooperatives)

Monitoring

•Producer and land parcel data.
•Ecological schemes (AEE).
•Crop recording and monitoring.
•Through sensors:

- ✓ Soil moisture sensors monitor soil humidity.
- ✓ pH and NPK sensors measure soil quality.
- ✓ Meteorological sensors track environmental conditions affecting the climate in land parcels.





Decision Making and Recommendations

•Environmental management planning.
•Bulk user management.
•Support for AGRO 2 & GLOBALG.A.P. standards.
•Determine when and how much to irrigate.
•Decide when and how much to fertilize.
•Provide alerts for potential disease outbreaks based on weather conditions and land parcel data.

B . Biodiversity and Green book/registry

Monitoring

- Management of Municipal Green Registries.
- status of plants, parks, and trees.
- Tracking NDVI (Normalized Difference Vegetation Index) for vegetation health.
- ongoing maintenance tasks and activities.
- visitor traffic to green spaces.
- Recording not only vegetation but also infrastructure elements, such as water fountains, benches, and other facilities.

Decision Making and Recommendations

- Maintenance and optimization of green spaces.
- Organizing actions for ecosystem management.
- Scheduling maintenance tasks and activities for improved efficiency.
- Planning improvements based on visitor patterns and infrastructure needs.

C. AQUACULTURE and ENVIRONMENT

Monitoring

- Production monitoring
- Environmental indicators.
- Facility security.

Decision Making and Recommendations

- Production optimization(Feed, Health)
- Management of environmental risks.
- Security management in aquaculture.

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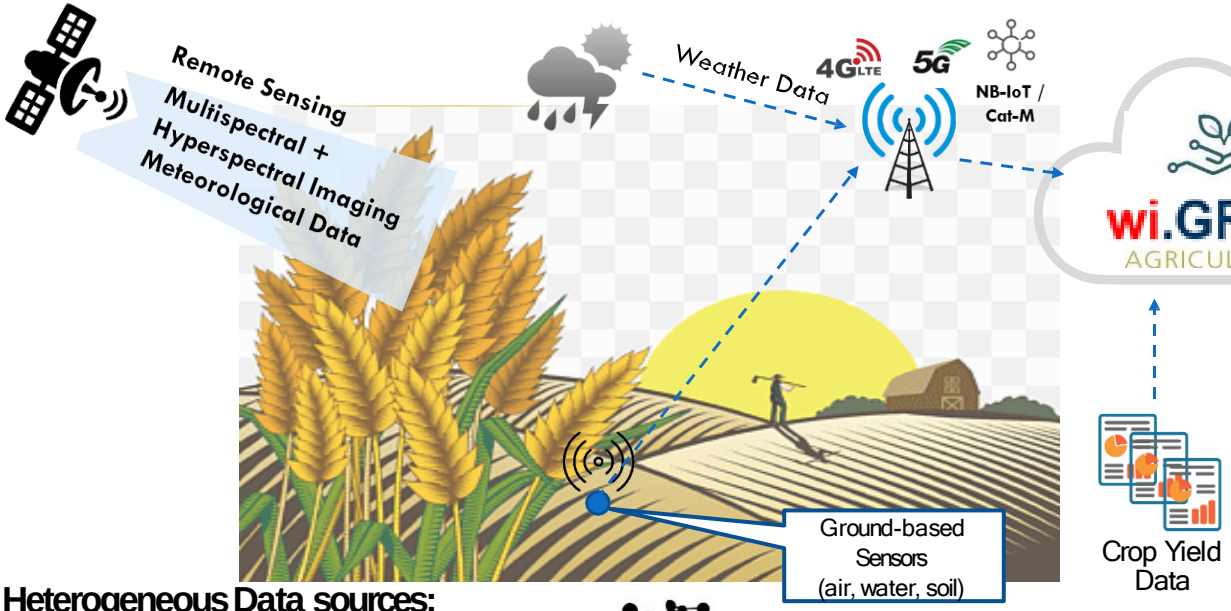

Components:

- **Devices:**
  - Air Quality Sensors, Water & Soil Sensors, Weather Stations, Cameras, Drones
- **Applications:**
  - Weather Forecasting
  - Crop Monitoring
  - Precision Agriculture
  - Irrigation Management
  - Pest Control
  - Autonomous Farm Machinery
  - Disaster Response

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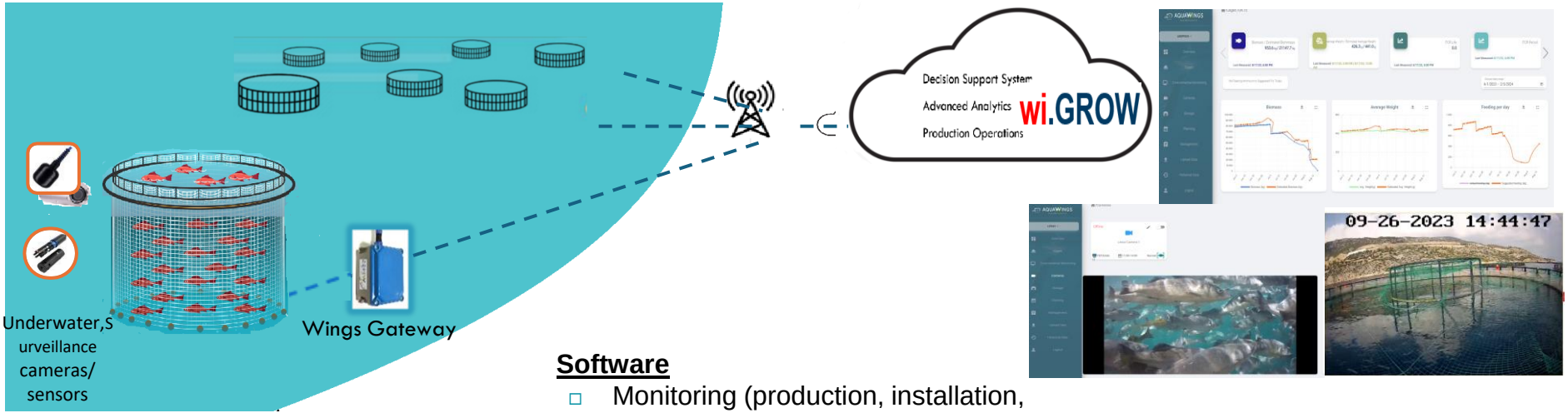

Hardware

- Under water cameras
- Under water sensors
- Surveillance cameras
- WINGS gateway

Network / Cloud

- 5G, 4G, WiFi, or other
- Edge / core cloud, security

Software

- Monitoring (production, installation, environment)
- Average weight estimation
- Feeding optimization
- Behavior pattern, health
- Alerts and recommendations
- Foundation: Video analytics, data ingestion and analysis, custom algorithms for decision support

Thank you

www.wings-ict-solutions.eu