



Supply Chain Management





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The Group

Diagram was established in 2024 through the transformation of the **IBF Servizi SpA Group** and the acquisitions of Agronica Srl, Abaco SpA, Agriconsulting SpA and Netsens Srl.

It is an **Italian and European leader in the digitalization** of services dedicated to the **agri-food sector**, in the development of farm management **software**, and in the **management of delivery, processes, monitoring, and control of support programs for the environment and agriculture**.

As a partner of major governments across the European continent, it supports Public Administration, farms, banking and insurance institutions and the agri-food industry with the aim of **promoting social, economic and environmental sustainability**.

Today, the company is owned 41.6% by CDP Equity, 41.6% by Trilantic Europe and 15% by BF International.

The challenges of modern distribution

- Monitoring and implementing ESG commitments across one's supply chain



- Reducing GHG emissions



- Monitoring compliance with production standards or cultivation/animal welfare protocols



- Agreeing with suppliers on the implementation of more sustainable farming and animal welfare practices, and monitoring their application



Introduction

The solution dedicated to agro-industrial supply chains, capable of meeting the needs of Cooperatives, Producer Organizations (POs), Consortia and Industries, was created by integrating advanced traceability and monitoring capabilities, from production to the final consumer.

The platform facilitates complete management of administrative compliance, integrates advanced sensors, machinery and production facilities and improves logistics efficiency and distribution.

It also provides essential tools for technical support, inspections, and document management required for certifications, ensuring transparency and environmental sustainability.

The solution integrates data from multiple sources, satellite observations, direct field inputs, or national databases, ensuring a complete and up-to-date view of crop health and the effectiveness of agricultural practices.

Monitoring enables targeted planning of treatments and resources, preventing potential damage from adverse climatic events and reducing disease risk thanks to advanced prevention and alert tools.

Management and control of field production



Specific features for managing and controlling field production, essential to ensure product compliance and trace the production process:

- **Audits and Checklists:** ensure the full correctness of technical activities, certification activities, and document collection through dedicated checklists used to verify compliance for access to the sales market.
- **Visits:** a tool to support visits for technical surveys (phenological stages, adversities, yield estimates), audits, inspections and on-farm checks and to acquire documents and images for any purpose related to the relationship with the supply chain.
- **Document management and deadlines:** management of documents needed for supply-chain certification and for any other purpose, contracts, reports, images and monitoring of any expirations.



Supply Chain Logbook



It allows to manage an unlimited number of companies, thanks to a hierarchically ordered platform.

The company can record all its agricultural practices and produce the Treatment Register. Thanks to the Supply Chain Logbook, the supply chain manager can check whether the contributing companies are correctly following the regulations to ensure quality production in accordance with the protocols. Each company and specific groups within the organization can access company records, fields and crops with the option of graphical crop plans and a top view approach using Google GIS mapping.

- **Warehouse management**
 - Plant protection products (pesticides)
 - Printing of the warehouse register
- **Phytosanitary treatment management**
 - Crop protection
 - Weed control
- **Controls on treatments**
 - Compliance with label instructions/ records
 - Compliance with application doses
 - Compliance with the maximum number of treatments
 - Required by label and PPE (personal protective equipment)
 - Interval between treatments with the same product
 - Compliance with maximum dose per hectare per treatment and per year
 - Possibility to perform retroactive controls and checks thanks to the historical database
 - Control of the pre-harvest interval (withholding period)
 - Eligibility for open-field or greenhouse use
- **Printing of the treatments register compliant with Legislative Decree 150/2012 and PAN**
- **Traceability:** deliveries and QR code
- **Calculation of explicit crop costs for each crop**
 - Cost for each farming operation
 - Hourly labor cost and machinery cost
 - Cost of inputs/products (with weighted average cost)
 - Explicit costs per hectare and per production unit
- **Direct access to labels and safety data sheets**
 - Current/valid
 - Historical
- **Control of regional integrated production standards and related derogations**
 - Warehouse management of all technical inputs
- **Fertilizers, auxiliaries, consumables**
 - Printing of warehouse registers for all technical inputs
 - Fertilization management
 - Fertilization plans
 - Control of maximum NPK inputs by period and per single fertilization
 - Prints
- **Compliance requirements and printouts**
 - Integrated Production
 - EC Reg. 1698/05 EAFRD (FEASR)
 - GlobalG.A.P. certification
 - SQNPI certification
 - Cross-compliance
- **Printouts and controls for organic farming**
 - Checks of authorized active substances
 - Printouts and controls according to EU Reg. 848/2018

Monitoring and assessment solutions for environmental parameters

Diagram provides ready-to-use solutions for monitoring and assessing environmental parameters, even without direct involvement of suppliers:

- Soil Health
- Soil Mapping
- Carbon Storage
- Erosion Risk Indices
- Weather Risk Indices
- Water Balance Estimation
- Monitoring of Deforested Areas



Soil Health



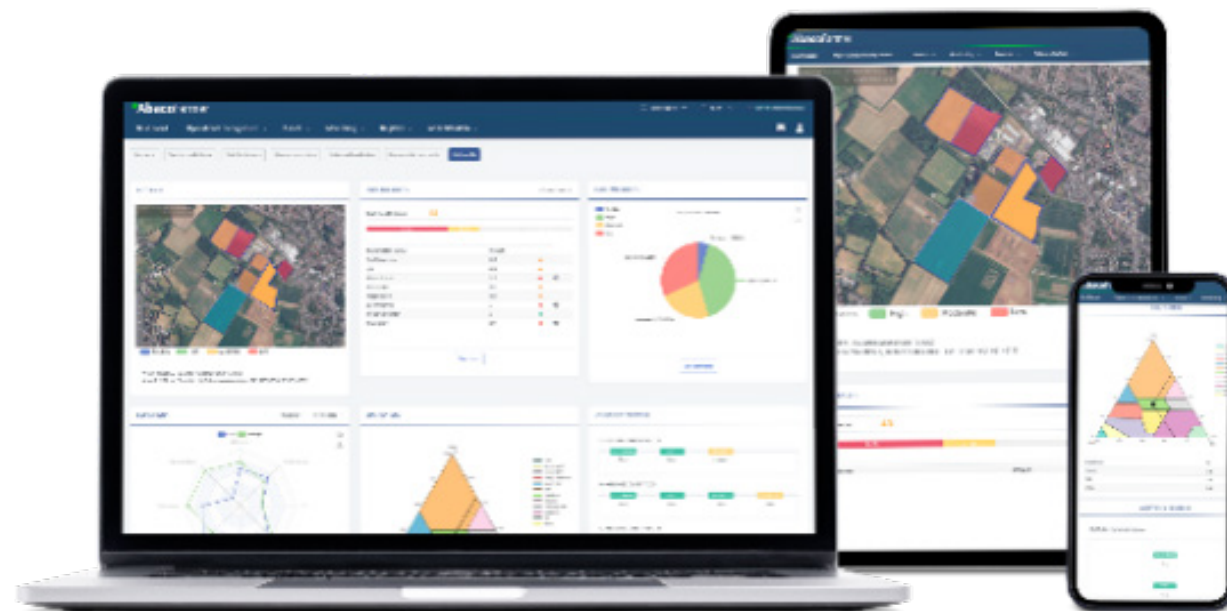
The solution **analyzes soil, drastically reducing the number of samples** compared to traditional methods and digitizes analysis results on the platform and on the mobile app.

Main parameters detected:

- pH and macronutrients: phosphorus, magnesium, potassium, sodium, calcium
- Soil texture
- CO₂ (biological activity) and organic matter
- Earthworm count and VESS

The supply-chain leader has access to:

- **Complete mapping of all cultivated plots**
- **Soil health index** for each single plot or for the entire supplier base
- Historical index to **demonstrate improvements** across the supplier base
- An intuitive view of interventions aimed at **maintaining a satisfactory level of soil health**

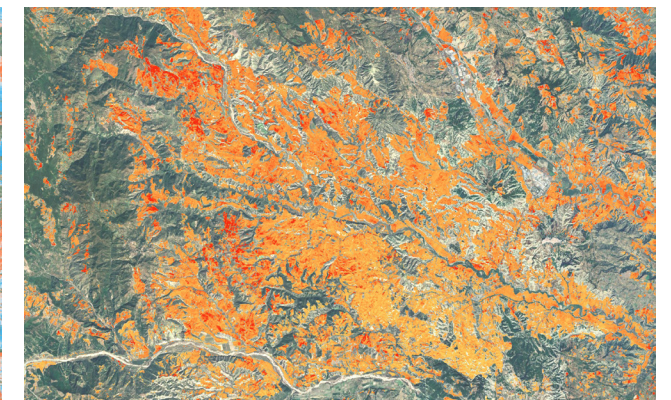
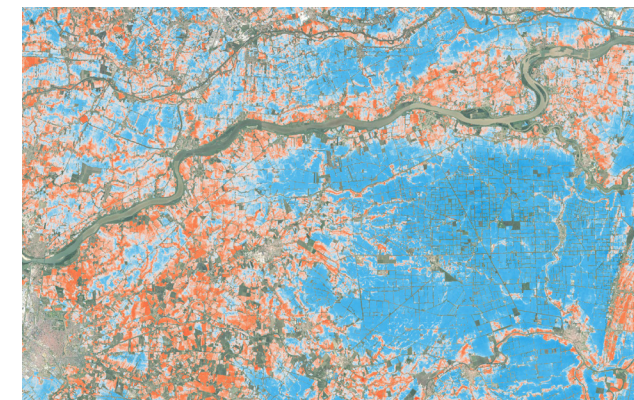


Soil Mapping



Digital soil maps display, in a dedicated layer:

- Particle size distribution (percentage of clay, silt and sand)
- Nitrogen, Phosphorus, Magnesium and Potassium
- Cation exchange capacity
- pH



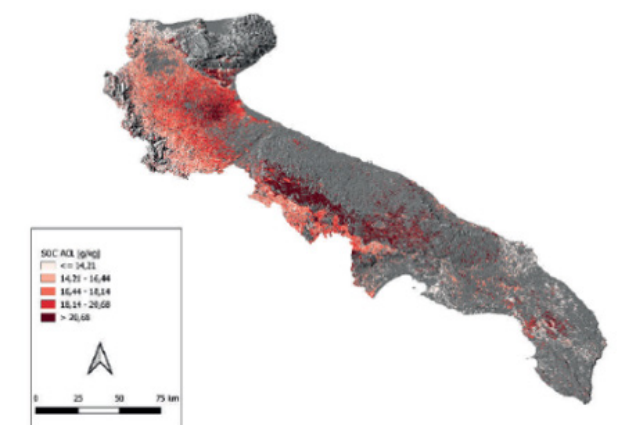
Organic Carbon



Monitoring soil organic carbon enables the development of policies that promote improved agricultural practices aimed at increasing carbon sequestration.

The soil **organic carbon** map is an essential tool for supply chain governance, allowing stakeholders to:

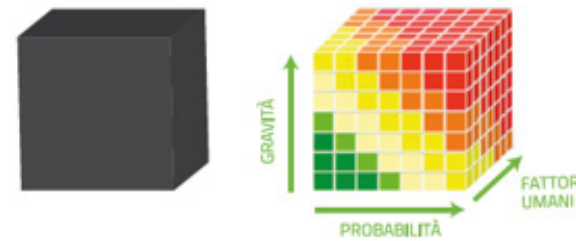
- guide production processes toward more sustainable practices
- communicate sustainability commitments to end consumers



Erosion Risk Index



- The maps allow users to consult:
 - long-term average annual soil loss
 - average annual soil loss rates due to erosion, broken down by five contributing factors (rainfall, morphology, soil characteristics, vegetation cover, and human anti-erosion practices)
- They also provide:
 - a composite **soil erosion risk index** derived from erosion-related soil loss rates, expressed as eroded mass (t/ha/year), based on observations collected over the past 20 years
 - These maps are an indispensable tool for territorial supply chain governance, enabling stakeholders to:
 - steer **production processes** toward more sustainable practices
 - communicate sustainability commitments to end consumers



Weather Risk Index



By processing satellite and sensor data, it is possible to identify risks associated with climate-related phenomena and/or catastrophic events that have occurred.

These indices are used by banking and insurance institutions to:

- enhance client risk assessment (banks)
- monitor and verify damage resulting from catastrophic events

The service provides not only risk indices, but also damage assessments for verified events, expressed in both qualitative and monetary terms.

Water Balance Estimation



Using satellite imagery and ground-based agrometeorological sensor data, the platform estimates the water balance of a given area and supports targeted interventions at the farm and supply chain levels to optimize resource use.

Monitoring of Deforested Areas



Under the EUDR regulation, due diligence is required to place on the EU market products and raw materials associated with a high risk of deforestation, including cattle, coffee, palm oil, cocoa, rubber, soy and wood.

The solution provides **geolocated registry/master** data for soy and cattle and enables the **automatic generation of due diligence reports**.

By analyzing historical satellite imagery of the geolocated areas, **land use** is monitored and **alerts** are issued when plots are identified where post-2020 deforestation has occurred.



Benefits

- 1. Always up-to-date data and parameters available to purchasing, **CSR and quality departments**.
- 2. Always up-to-date data and parameters to implement and improve **sustainability reporting**.
- 3. Real-time monitoring of commitments undertaken by **suppliers**.
- 4. A powerful tool to communicate sustainability commitments to the **final consumer**.

Specialist consultancy on production standards and agronomic practices

Reference context

- The market rewards more sustainable cultivation and livestock farming practices
- Regulations impose new commitments on production in terms of animal welfare and cultivation
- Compliance requirements often require significant mediation with suppliers, as well as specific expertise in agronomic and livestock domains

Specialized consulting



Diagram represents excellence in R&D thanks to solid collaborations with leading Research Centers and Universities, both nationally and internationally. Today it can rely on around 500 agronomists, including employees and collaborators, ensuring a high level of competence and specialization.

Leveraging this experience, the Group is able to manage production standards by identifying sustainable growth objectives and adopting good agricultural practices and regenerative and conservation agriculture techniques. Thanks to the latest precision agriculture technologies, such as remote sensing, proximal sensing, management software and DSS (Decision Support Systems), it monitors compliance with standards while facilitating suppliers’ work through platforms and mobile apps.



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