Food and Agriculture Organization of the United Nations

European Bank for Reconstruction and Development

FAO INVESTMENT CENTRE

Highlights from the visit to northern Italy on agrifood innovations

October 2025

Rich Field Experience: Ecosystems for agritech & growth

Diverse Stakeholder Engagement:

Meeting with key players across the agrifood system spectrum

Witnessing the Full Cycle:

Understanding how technologies are developed, incentivized, scaled, and made profitable

Key Actors Observed:

- **Research Centers:** Leading R&D and pilot testing.
- **Private Sector:** Driving current and future innovation.
- **Aggregators/Cooperatives:** Aggre gating and supporting farmers while investing in sustainability and resource efficiency.
- **Policy Makers:** Investing and enabling the entire ecosystem to function effectively while derisking private investments.

How are these models relevant to the EBRD's operations?

The visit provided empirical evidence of the success of green investments, as promoted in EBRD's overarching policy frameworks and strategic pillars that focus on de-risking innovative projects:

Green Economy Transition: Showcases tangible elements of the circular economy, energy self-sufficiency, cross-sectoral energy synergies, and innovative technologies.

Food and Agribusiness Strategy 2025: Highlights successful implementation of green operations and innovations, supported by a functioning public-private ecosystem and effective policy/incentive support.

Private Sector Growth: Demonstrates how integrating cooperative and aggregator models with a focus on sustainability enhances private sector competitiveness in transition economies.

These models are particularly relevant for EBRD countries that rely heavily on agriculture, face climate vulnerability or natural resource constraints, and are actively working to upgrade productive infrastructure:

SEMED Countries: Can benefit from agrivoltaics (using solar energy in arid regions) to conserve land and energy simultaneously.

Eastern European and Central Asian Countries: Can utilize hypogeal cells (underground storage) for energy-efficient cold storage solutions.

All Countries: Can implement projects to recycle agricultural waste and generate energy through biomass and biogas systems.

All Countries: Should study the local enabling environment and the strong synergies between public, private, and research institutions to contextualize innovations and de-risk investments.

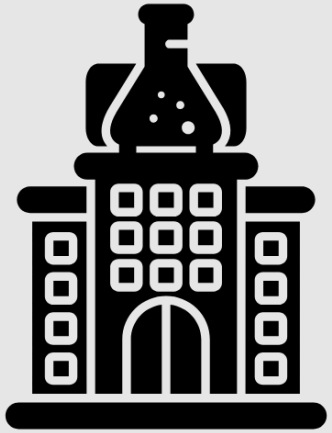
The FAO-EBRD collaboration supports:

Identifying leading innovators, companies, and institutions driving the environmental sustainability transition of agrifood systems from farm to fork.

Facilitating business connections and dialogue between local and international stakeholders to promote best practices and innovative solutions for circular and sustainable agrifood systems.

Identify and demonstrate investment opportunities in green agrifood system innovations to facilitate potential replication across EBRD countries of operation.

RESEARCH CENTRES AND UNIVERSITIES



Public-Private Investments in R&D to ensure sustainable intensification, competitiveness

UNIVERSITY OF TRENTO

FONDAZIONE BRUNO KESSLER

FONDAZIONE EDMUND MACH

eurac research

LAIMBURG RESEARCH CENTRE

Others....

Examples of how PV can be included in agriculture

Interspace PV

Overhead PV

Fencing

Greenhouse PV

Support Infrastructures

Research centres are developing practical solutions to make farming:

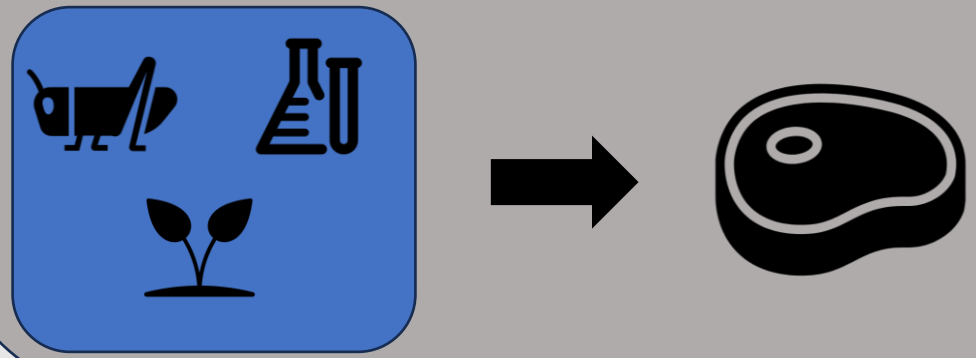
- greener
- more resilient
- more efficient while diversifying farmers' income and increasing profitability and market competitiveness

EURAC's Bolzano Demonstrator for Agrivoltaics in apple fields

Laimburg Research Centre is using experimental orchards to test numerous technologies, including sensors for water stress, pest prevention and control, climate change impact, light, humidity and soil fertility

INVEST: Nutritionally Viable and Environmentally Sustainable Alternatives to Animal-Based Foods Programme at the **University of Trento**

The programme explores and develop new formulations – including **plant-based, insect-based, and lab-grown proteins** – that are nutritionally balanced for consumers



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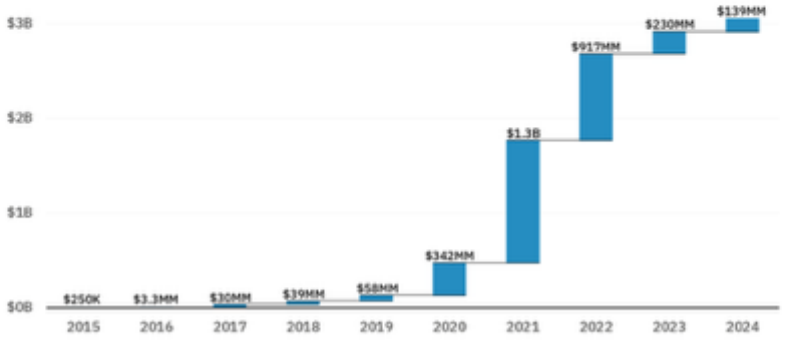
Investments in coltivated meat industry



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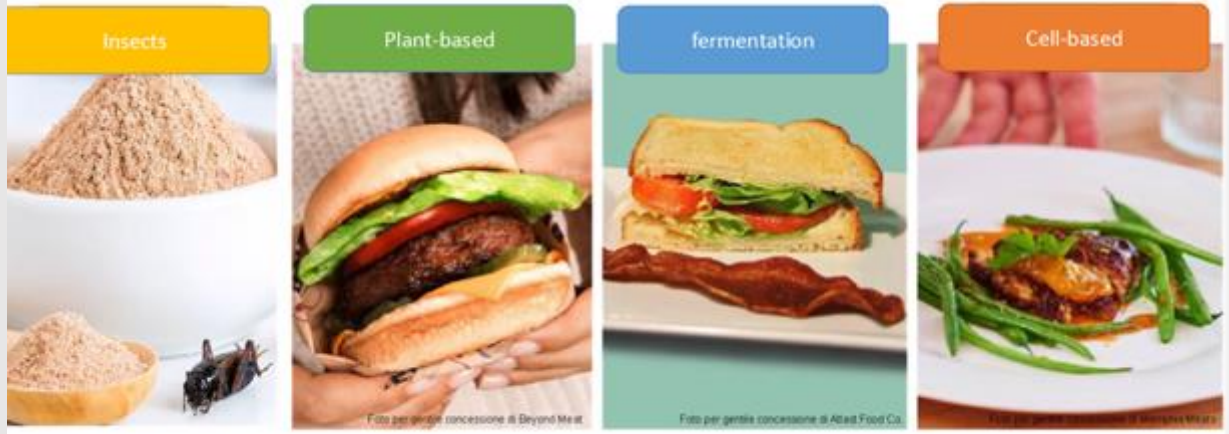
Alternative proteins



Fonte: Good Food Institute/Internet

ENTERPRISES

Sustainability investment as the key to business resilience against external shocks (e.g. COVID-19 and energy crisis) while looking towards the future

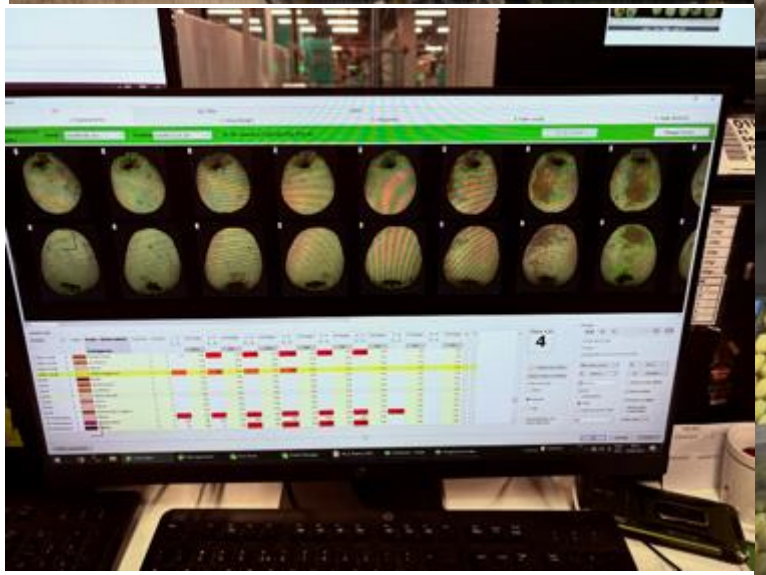
The **Melinda®** brand is owned by a consortium of 16 cooperatives, representing over 4 000 farmers in Val di Non

Strategically trademarked their name ("mela" [apple] and "linda" [clean]) as "clean apple"

They unified their predominantly small-scale local growers using advanced production and packaging techniques

They reduced OPEX by means of advanced cold chain management, supply chain management and automation, and quality preservation

They achieved massive energy savings (>50%) by partnering with a local mine to store apples in hypogeal cells complemented by an electric cable car for zero-emission transport



Sustainable economic development of the agrifood sector requires the inclusion of all actors to ensure synergic and optimal use of natural resources while promoting rational and sustainable circular economy principles

Melinda®

\+
other
companies

Partnering

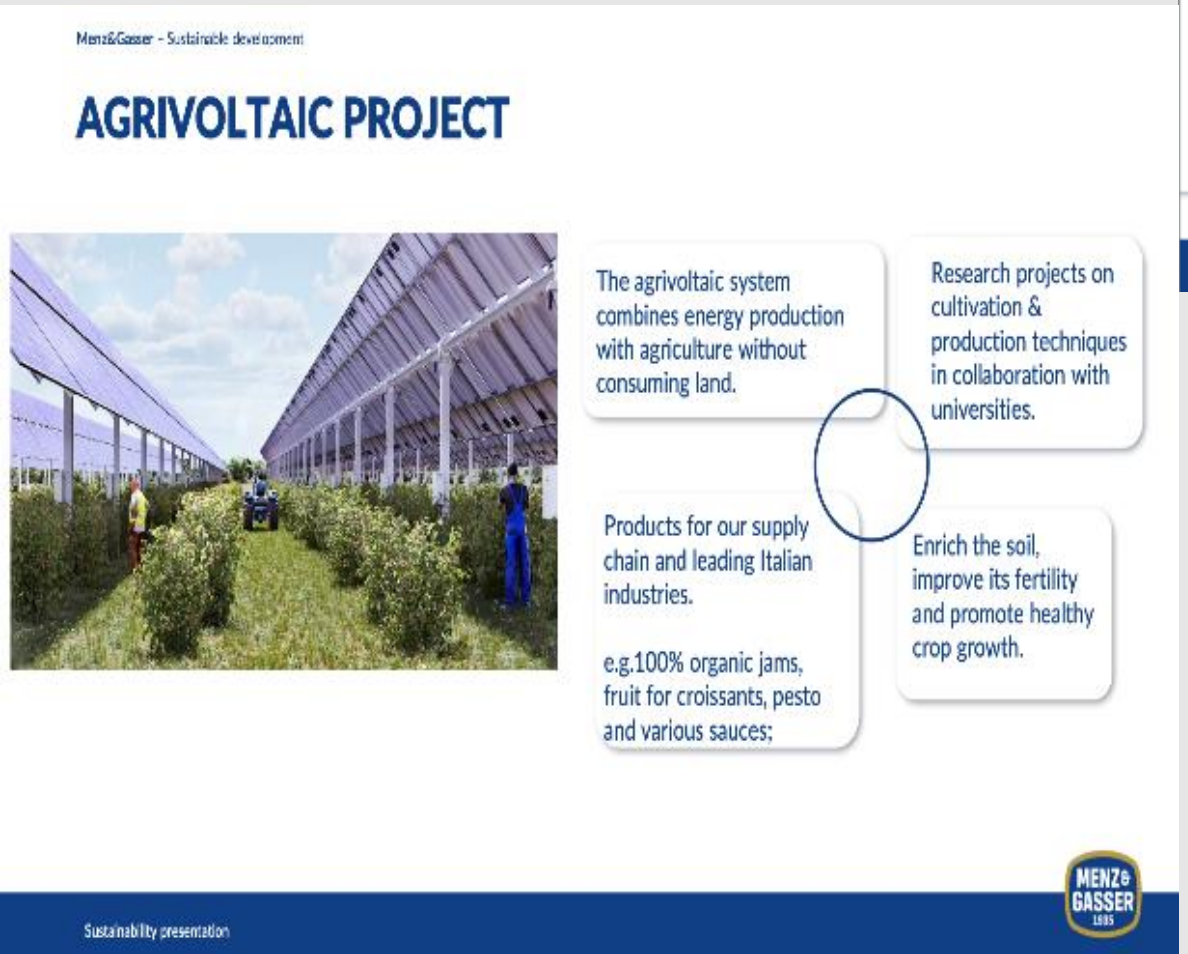
TASSULLO

Data centre

Tassullo, a **mining and construction company**, leveraged its expertise to design and implement **innovative underground (hypogeal) storage solutions within dolomia mines**. These solutions, utilized by food producers like Melinda, Trentigrana (cheese) and Altemasi (wine), demonstrate how strategic planning and integration enable significant energy savings and reduce food losses during storage.

Tasullo's Terra project ensures mutual benefit and circularity: the mine's stable temperatures and humidity reduce energy needs and losses. Soon, the surplus heat from a data centre hosted in the mine will be channeled to manage temperatures in the underground (hypogeal) cells. This will allow for storage of diverse products, increasing energy-efficient synergies for all partners while reducing GHG emissions, land use and food losses

Menz & Gasser, among Italy's largest jam and marmalade producers, has long-term mission to develop a fully circular production system and achieve energy self-sufficiency. This strategy aims to reduce GHG emissions while simultaneously increasing productivity and quality of products.



The company **actively generates renewable energy from a diverse mix of sources**: biomass (sourced from local sawmills), biogas, and photovoltaic. Furthermore, they have committed a **€20 million investment** to promising initiatives including agrivoltaics, water management, recyclable packaging and the reduction GHG emissions among the others.

LOCAL AUTHORITIES

Provincia autonoma Bolzano - Alto Adige

PROVINCIA AUTONOMA DI TRENTO

Enabling investment for private sector green and inclusive growth through sound infrastructure, R&D, financial incentives and policy

The provincial government of Trento is dedicating over **half a billion euros annually to R&D** (all sectors aggregated), funding this work through institutions like the University of Trento and private foundations such as the Bruno Kessler Foundation and Edmund Mach Foundation.

The region provides a successful example of PPPs where **public institutions** offer regulatory support, funding, and incentives, while **private foundations and companies** contribute innovation, agility and operational expertise.

The province employs **a systemic approach promoting inter-sectoral integration**, where agriculture is leveraged by and contributes to other economic sectors (e.g. farmers offering agritourism services and tourism promoting regional, quality-certified agricultural products).

THANK YOU