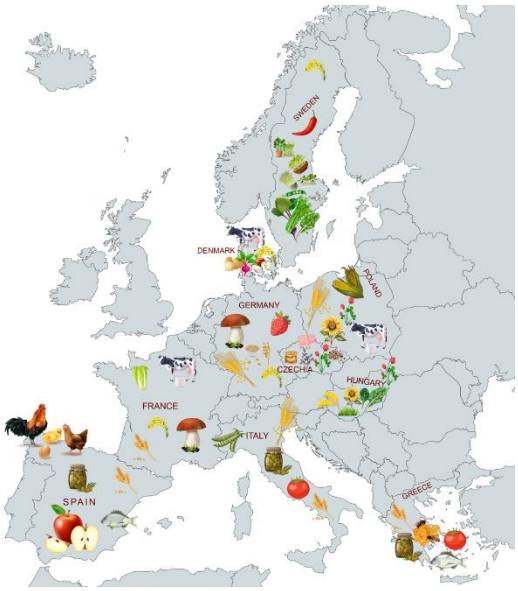
ECO-Ready Newsletter 3/2024

1. Living Labs identify scenarios and drivers on climate, biodiversity, food security



Products and drivers. ECO-Ready's cooperating 10 Living Labs identified five food product priorities for each of the Living Labs and selected relevant drivers on climate change, biodiversity, and food security which would impact food priorities specific to their regions.

Scenarios. A scenario development team, consisting of specialists from across multiple disciplines, together with the living labs representatives, developed five scenarios for each of the ten living labs, resulting in a total 50 scenarios. Of the five scenarios for each region, one represented the *status quo* for 2030 and 2050, two scenarios represented shocks, and two additional scenarios represented mitigation strategies to the shocks.

Mitigation of shocks. These scenarios explore agricultural practices, policy changes, innovative farming ideas, and consumer-producer interactions to help mitigate future shocks. Futures which indicate a threat to food security were identified and plans for mitigation were proposed considering systemic inputs. These reports, Deliverables 1.3 & 1.4, were led by the team of CZU, in conjunction with all 10 living labs representatives and specialists from across the ECO-Ready consortium.

More on Living Labs

2. ECO-Ready Scenario Workshop with Living Labs

The ECO-Ready scenario workshop with Living Labs was organized in June 2024 in The Hague by ECO-Ready partners Czech University of Life Sciences and Wageningen Research. It aimed at the continued development of scenarios for each of the 10 ECO-Ready Living Labs, to train Living Labs representatives in scenario development, to introduce MAGNET and LCA modelling to the Living Labs, to identify indicators and key measurable inputs, and to identify Living Labs' contribution to modelling and to measure/assess indicators.

The first day primarily focused on introduction and presentation of LCA and scenario modelling tools (MAGNET). Afterwards the participants were divided into groups to discuss main common drivers of food insecurity/lack of food system resilience.

On the second day the focus was on deepening the primary drivers into more specific sub-categories from big drivers affecting the food security and resilience and possible policy and technical interventions. Finally, in the plenary session

one representative for each Living Labs presented main drivers and possible interventions. In some cases, this sparked discussions on the role and at times lack of facilitating regulations and the interrelation of specific issues across different EU regions.

Overview on workshop

3. ECO-Ready at Field Day of ECO-Ready Partner *Institute of Field and Vegetable Crops*

On August 28, 2024, ECO-Ready partner Institute of Field and Vegetable Crops from Serbia organized its annual '*Field Day of Annual Crops*'.

The *Institute of Crop and Vegetable Crops* has been hosting the Field Day in Rimski šančevi for decades, bringing together diverse stakeholders, a significant number of visitors, agricultural producers, and state, provincial, and local government representatives.

Field trials of soybean, maize, sunflower, and alternative cultures were demonstrated. Presenting both international and national projects, researchers from the Legumes Department shared updates on their R&D activities including the ECO-Ready project. The presentation focused on the various ECO-Ready initiatives on "Scenario Development" and the opportunities evolving from the cooperation with ECO-Ready Living Labs across Europe.

More about the Institute

4. SECO-COLLAB Living Lab from Sweden

SECO-Collab Living Lab in Sweden stands at the cutting edge of sustainable urban farming. Led by **Swegreen**, a leader in in-store farming solutions, providing vertical farming systems to various partners (including supermarkets, restaurants, and companies), allowing them to grow fresh produce on-site.

The Living Lab, situated within the iconic Fotografiska museum in Stockholm, serves as a hub for innovation, where advanced farming techniques and sustainable practices come together to transform how food is grown and consumed in urban communities.

The Living Lab is a collaborative effort involving key partners such as **Mälardalen University** (MDU), which contributes its expertise in resource management, data science, and plant monitoring, and **Fotografiska**, where our urban farm not only thrives but also supplies fresh ingredients to its renowned Green Michelin Star kitchen.

The urban farm produces a variety of crops, including herbs, chilis, brassica, leafy greens, and microgreens, all grown sustainably and used directly in Fotografiska's culinary creations. We are transforming this farm to the core of our Living Lab and a hub for development and exchanges in a triple helix setting.

More on SECO COLLAB

5. AIDEMEC Living Lab from Italy

AIDEMEC Living Lab uses agronomic, phenotyping and AI solutions for early abiotic and biotic stress detection. The consortium is in the Mediterranean region and will focus on tomato, wheat, barley, Olives and beans. AIDEMEC sites are in 5 different sites covering diverse soil and weather conditions. These solutions will then be transferred to farmers, engaging them and end-users to take corrective measures to protect crops and avoid yield loss in changing climate conditions.

AIDEMEC will generate knowledge on the **impacts of climate change** on the selected crops and develop AI models for **early detection of abiotic stress** from aerial images. Field trials and multispectral image datasets will allow training deep learning models to find indicators of biotic and abiotic stress. The resulting web platform will enhance real-time monitoring and early warning systems, enabling preventive actions to safeguard yields under changing climate scenarios.

More on AIDEMEC

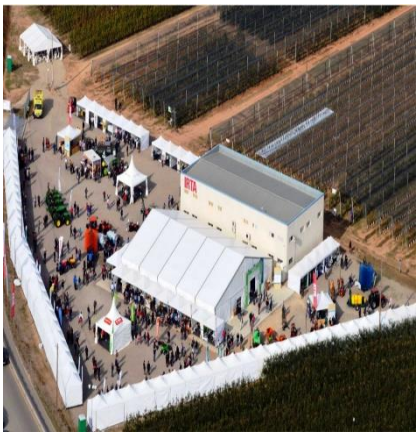
6. PROBIO Living Lab from Czech Republic

The Living Lab PROBIO leverages over 15 years of organic farming experience to develop, test, and implement sustainable agricultural practices that can serve as a model for other regions facing similar challenges. By addressing these critical environmental issues, the Living Lab aims to secure the long-term viability of farming in the region while enhancing ecosystem health and resilience.

The Living Lab concept brings together a diverse consortium of partners, including local farmers, research institutions, policymakers, and industry stakeholders. These partners collaborate to co-create and test innovative solutions in real-world settings, ensuring that the outcomes are practical, scalable, and impactful. By integrating scientific research with traditional farming knowledge, the Living Lab PROBIO aims to enhance the resilience of agricultural systems, promote biodiversity, and secure food production against the backdrop of climate change.

More on PROBIO

7. CONCAT Living Lab from Spain



Collaborative mONitoring and Climate AdapTation: Living Lab for enhancing the resilience of agriculture in Catalonia.

Catalonia holds an agrifood industry that produces more than 8 million tons of agricultural products. It boasts a diverse landscape with key products including high-quality olive oil, various fruits such as apples and citrus, nuts like hazelnuts and almonds, a variety of vegetables, staple cereals like wheat and barley, grapes for both wine and consumption, livestock including pork and poultry, rice in the Ebro Delta, potatoes, and renowned wines from regions like Penedès and Priorat. Overall, the Catalan agrifood system accounts for 20% of Catalan industrial GDP, which highlights its social economic importance.

In the last five years, Catalonia has witnessed the accentuating effects of climate change, which has strongly impacted its agricultural production capacity. Severe droughts, extreme temperatures, changing rainfall patterns, and soil degradation have had a cumulative impact on the production, quality, availability, and prices of the main agricultural products. The Living Lab has been established in Catalonia to accelerate R&D in climate change mitigation, tackling

immediate challenges faced by local producers and other stakeholders, as well as mid-term and long-term challenges related to food security and the overall resilience of the Catalan food systems.

It aims at establishing the experimental setup for selected five products and select appropriate scenarios for testing in collaboration with ECO-Ready expert partners.

More on CONCAT

8. Migros Turkey Agriculture Platform

ECO-Ready partner Migros from Turkey has newly established an online platform accessing a wide range of farmers of Turkey including cooperatives and associations. It informs about good agricultural practices, video trainings, sustainability programs, women and family clubs, the opportunity to be includfed in the Migrois ecosystem and more...

The platform is in Turkish, but one may use a translation function. The platform can incorporate any training and eductaional material that can be help farmers. The material shall be simple and shall be educational and for training purposes.

More information

9. ECO-Ready at World Conference 2024 of IFAMA in Almeria, Spain

The International Food and Agribusiness Management Association organized its World Conference 2024 in Almeria, Spain under the heading of 'Sustainability and Innovation'.

It brought together scientists, business leaders, and student groups in a center of Spanish food production for delivery to the European and global markets. A two-day scientific symposium is followed by a two-day business forum where science meets global business leaders. A specific feature of IFAMA is a student case study challenge where student group from all continents work competitively on business cases. ECO-Ready war represented by partners proQuantis and Wageningen University. proQuantis presented and discussed the ECO-Ready challenge of contingency planning for food security in times of climate change.

Almeria is located in one of the driest regions in Spain with all production under cover and the use of groundwater for producing vegetables and fruits. The sustainability of the region's production scheme was in discussion during the conference. It was even challenged when it came up that the plastic field covers need to be replaced every few years. Innovations needed.

More on the conference

10. ECO-Ready partner at the 28th LRN24 Conference in Dublin

ECO-Ready partner *Cranfield University* participated with Prof. Bourlakis and Dr. Nam Vu in the 28th LRN24 (Logistics Research Network) conference in Dublin.

The LRN is an informal network of academics, researchers, practitioners and other interested individuals working in the area of logistics, supply chain management and operations management. Its main objective is to facilitate the generation, promotion and dissemination of relevant research. The Cranfield University team presented research as part of the ECO-Ready project, highlighting the impacts of climate change on food supply chain management and food systems. The conference was a successful opportunity to connect and promote the ECO-Ready project to relevant scientific community and industry.

More on the conference

11. Call for papers International Forum on System Dynamics and Innovation in Food Networks *(191st EAAE seminar)*

The Forum is a joint initiative by agri-food groups of leading European and international universities and business schools providing a discussion platform for the European and international scientific community

The Forum is listed by the European Association of Agricultural Economists (EAAE) as its 191st seminar and supported by the International Food and Agribusiness Management Association (IFAMA) and the International Association of Agricultural Engineers (CIGR).

The Forum is open to all interested groups but will allocate special sessions to ECO-Ready partners and Living Labs. It is the objective of this Forum to provide an interdisciplinary and creative discussion environment that generates new ideas for innovative and multidisciplinary research.

Its focus is on the analysis of the food system dynamics and interdependencies; the identification of drivers for sustainable system dynamics in the decision sphere of the system actors (e.g. chain management, consumers, agencies, policy, etc.); and on the identification and promotion of potential system innovations. .

The forum will feature presentations and discussions in a mountain venue that should foster exchange, creativity, and the development of new ideas for innovative and interdisciplinary research. *Submission of presentation proposals or proposals for discussion sessions are invited by October 11 through email fooddynamics@uni-bonn.de* .

More on the conference

More information

For more information on the project and its development during the coming years you may subscribe to the newsletter through the newsletter link on its website. Previous newsletters are accessible on the website www.ECO-ready.eu as well.

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