EU CAP NETWORK

Cross-visit
‘Monitoring animal welfare’

8-9 May 2025 | Italy

EIP-AGRI Operational Group projects

Cross-visit 'Monitoring animal welfare' 8-9 May 2025

EIP-AGRI Operational Group project 'IN-FORMA - Virtuous Parmigiano Reggiano supply chains with high levels of animal welfare'

Paolo Ferrari - Italy

Cross-visit 'Monitoring animal welfare' 8-9 May 2025

Operational Group ‘IN-FORMA - Virtuous Parmigiano Reggiano supply chains with high levels of animal welfare”

- **Country:** Emilia-Romagna region - Italy
- **Start and end dates of the project:** 10.03.2021-9.03.2024 (36 months)
- **Budget:** 296.844,63 €
- **Website links:** https://in-forma.crpa.it/
- **Partners:** 1 research organization (CRPA), 2 dairy (San Pietro and Cavola), 3 dairy farms (Aemme, Fattoria Rossi, Le Boccede), 1 training institution (Dinamica)

Operational Group ‘IN-FORMA - Virtuous Parmigiano Reggiano supply chains with high levels of animal welfare”

- **Main challenge:** Try to develop of pilot supply chains with high animal welfare standards based on national and international standards
- **Innovative solutions tested by the project:** Application of the requirements of animal welfare standards (i.e. Red Tractor, RSPCA, CIWF), identification of critical points and improvement actions in 36 dairy farms conferring to the two partner dairies (San Pietro and Cavola) and calculation of investments and operating costs of proposed improvements
- **Main results:** Investment cost (1.700-7.000 €/cow) and operating costs (36-43 €/cow)
- **What makes your project special:** Cost-benefit analysis and calculation of the incidence on production cost per litre of milk (+1 to +6.5%) to assess economic sustainability

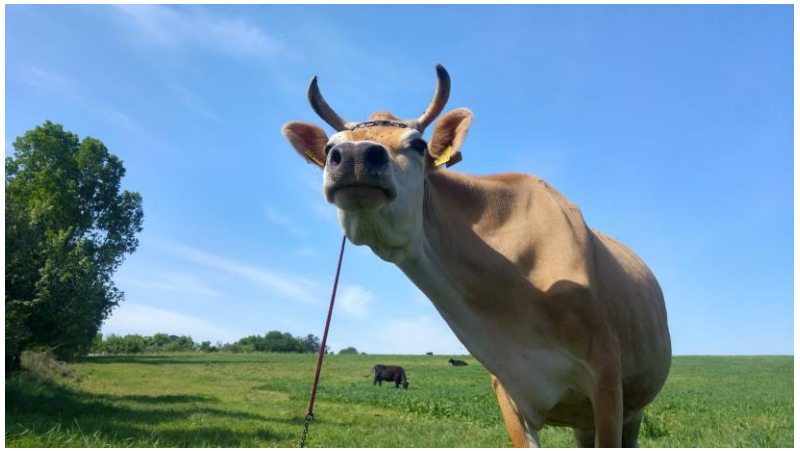
Operational Group ‘IN-FORMA - Virtuous Parmigiano Reggiano supply chains with high levels of animal welfare”

- **Ideas for future projects or needs:** Evaluation of the impact of the upcoming new animal welfare legislation in the livestock sector, including dairy cows, beef, pigs, laying hens, broilers, turkeys, rabbits, sheep, goats; Impact of livestock extensification on animal welfare and farm sustainability; Design and testing of innovative housing systems.
- **Further collaboration:** Long experience in EU (20 years) and national (35 years) research projects focused on welfare of farm animals, mainly dairy cows, beef, pigs, laying hens and borilers; IBA animal welfare protocol including resource and animal-based measures; Advice to livestock farmers; Cost and benefit analysis of measure to improve animal welfare; Collaboration with NGOs for animal protection; Design of livestock farming systems.

EIP-AGRI Operational Group project 'Cattle cooling'

Dorota Godyń - Poland

Cross-visit 'Monitoring animal welfare' 8-9 May 2025



Operational Group “Cattle Cooling”

- **Country:** Poland
- **Start and end dates of the project:** 09.02.2021– 29.02.2024
- **Budget:** 2 789 686,00 PLN
- **Website/social media links:** http://chlodzeniebydla.pl/
- **Partners:** National Research Institute of Animal Production (leader); Experimental Station of National Research Institute of Animal Production Kołbacz (farmer); HPQ Invest (SME), Zachodniopomorski Ośrodek Doradztwa Rolniczego w Barzkowicach (advisory entity)

Operational Group “Cattle Cooling”



- **Main challenge addressed by the project;** Improve of microclimatic conditions in livestock buildings. Improve animal welfare.
- **Innovative solutions developed / tested by the project;** an improved ventilation system in the curtain barn, an energy-efficient cooling and air exchange system for the milking parlour and holding area, an innovative technological and functional system for maintaining calves in open-type building.
- **Main results of the project;** As part of the project, new barns for cows and calves were thoughtfully equipped, providing comfortable and well-designed spaces for the animals. Additionally, an innovative cooling system was installed in the milking parlour, ensuring a fresh and pleasant environment without adding extra humidity.

Operational Group “Cattle Cooling”

- **What you are most proud of about your project/what makes your project special:** Great cooperation ☺, ensuring very good environmental conditions for cows and calves in the barns, an impressive milking parlor cooling system
- **Ideas for future projects or needs / issues based on which you want to build further collaboration:** We are eager to explore topics related to animal welfare, with a particular focus on heat stress, physiological markers, and behavioral analyses
- **What you can offer to future partners:** We warmly welcome future partners to collaborate with us. We offer a strong foundation for joint projects, including access to a diverse base of animals, state-of-the-art equipment such as microclimatic meters and thermography cameras etc. Most importantly, we bring a positive and dedicated attitude ☺

Operational Group “Cattle Cooling”






EIP-AGRI Operational Group project 'Future breeding'

Aleksandra Matwiejuk - Poland

Cross-visit 'Monitoring animal welfare' 8-9 May 2025

Operational Group `Future Breeding’

- **Country**: Poland
- **Start and end dates of the project**: 01.01.2023 – 30.04.2025
- **Budget:** 477 273,28 €
- **Website/social media links:** https://hodowlaprzyszlosci.pl/
- **Partners:** 4 entities: a leader(Łukasz Czech), an enterprise (Smart Soft Solutions), a farmer, and a Warsaw University of Life Sciences.

Operational Group ‘Future Breeding’

- **Main challenge addressed by the project:**

Early disease detection in livestock, reducing antibiotic use, and improving animal welfare through real-time monitoring and data analysis

- **Innovative solutions developed / tested by the project:**

Development of an automated thermal imaging with real-time alerts to monitor livestock body temperaturę and behawior, enabling early interventions befor clinical symptoms appear.

- **Main results of the project:**

Preliminary trials show that real-time temperature tracking enables early identification of health issues and supports reduced antibiotic usage. Initial data confirm strong correlations between temperature, feed intake, and overall animal well-being

- **What you are most proud of about your project/what makes your project special:**

The project’s use of thermal imaging combined with automated alerts represents a cutting-edge approach to proactive livestock health management. It enables early responses and aligns with sustainability and welfare goals in animal farming

Operational Group `Future Breeding’

- **Ideas for future projects or needs / issues based on which you want to build further collaboration**

Exploring health monitoring in calf-rearing and dairy systems, understanding how physiological and behavioral data can inform welfare, and scaling precision tools across livestock production models

What you can offer to future partners (any type of knowledge, resources, shared activities, etc.)

Expertise in developing and testing real-time thermal monitoring systems, data analysis on health-behavior relationships, and practical experience integrating sensor technologies into farm management. The team is also experienced in coordinating cross-sector collaboration

EIP-AGRI Operational Group project 'KuJA – Simply Healthy'

Andrea Fiedler - Germany

Cross visit 'Monitoring animal welfare' 8-9 May 2025

Operational Group ‘KuJA Project – Simply Healthy’

- **Country**: Bavaria, Germany
- 2024 - ongoing
- ≈ 79.000 €
- Veterinarians

Hoef Health Associates

Farmer / Hooftrimmer

Verein Geprüfter Klauenpfleger e.V. VGK

Lukas Neumayer

- proPlant GmbH
  development of custom software solutions for the agricultural sector
- Prof. Dr. C. Muelling, Faculty of Veterinary Medicine at the University of Leipzig, Germany
  supporting virtual learning content

Operational Group ‘KuJA Project – Simply Healthy’


clean - dirty

Monitoring the health of calves / young cattle / fattening cattle

- risks like contamination, behaviour signals, and deformities
- impacting lifelong health
- problems:
  - time-intensive
  - extra challenge: youngstock – black hole
  - selection of parameter / bottle necks
  - remedy? ➡ measures to improve



isolated animal

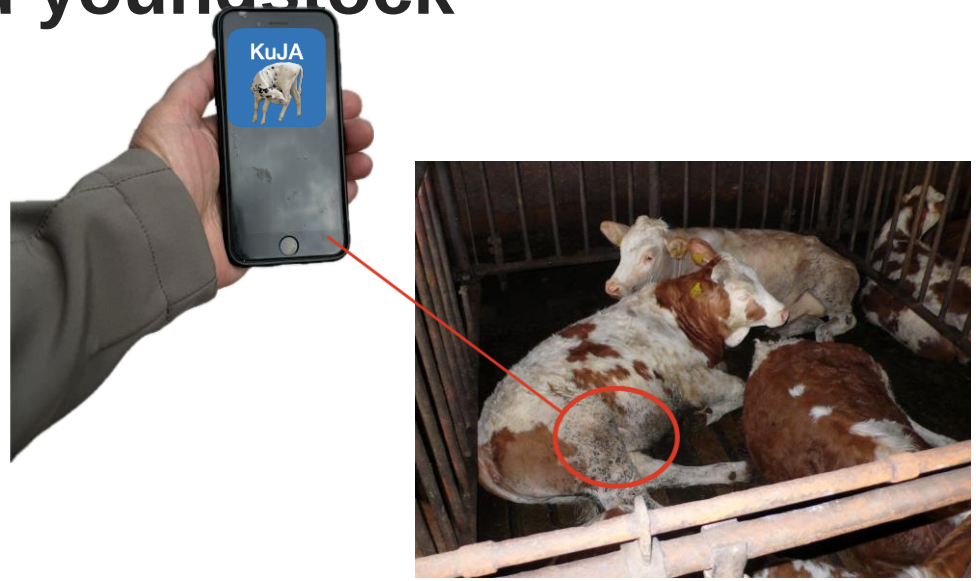
cow-knocked heifer (tarsal valgus)

Operational Group ‘KuJA Project – Simply Healthy’

KuJA – Kalb und Jungvieh-App

App for monitoring calf and youngstock

- voice-controlled documentation
- even in challenging farm environments
- documentation almost in passing
- streamline the recording of weaknesses in rearing
- provide actionable recommendations to improve housing, feeding, hygiene and health



Operational Group ‘KuJA Project – Simply Healthy’

happy calves

healthy youngstock

valuable cows with potential for longivity

Operational Group ‘KuJA Project – Simply Healthy’

Ideas for future projects:

- still in the process of making the current one(s)
- we can imagine linking the two projects in the future
  - KuJA - Simply Healthy
  - DD HACCP – Digital Dermatitis Telemedicine

- Our offer:
  - broad network in scientific and industrial environment
  - extensive knowledge on cattle hoof health, husbandry and behavior
  - great experience in practical application, scientific research and data analysis in the field

Operational Group ‘KuJA Project – Simply Healthy’

Sources

- Slide 3: https://tu-dresden.de/tu-dresden/newsportal/news/forschende-entdecken-extrem-gefraessiges-schwarzes-loch-aus-der-zeit-kurz-nach-dem-urknall

EIP-AGRI Operational Group project 'DD HACCP – Digital Dermatitis Telemedicine’

Katharina Grimm- Germany

Cross-visit 'Monitoring animal welfare' 8-9 May 2025

Operational Group ‘DD HACCP – Digital Dermatitis Telemedicine’

- **Country**: Germany
- 01.05.2024-31.12.2025
- ~ 50.000 €
- Veterinarians of the Hoof Health Associates:
  - Dr. Andrea Fiedler
  - Dr. Charlotte Kröger
  - Dr. Katharina Grimm (employee)
- Farmer and Hoof trimmer: Lukas Neumayer
- Next step: communication designer Felix Widmann

Operational Group ‘DD HACCP – Digital Dermatitis Telemedicine’

Challenge of Digital Dermatitis (DD) in Cattle:

- Widespread disease on herd level
- Question of management measures
- Existing knowledge doesn’t get where it’s needed
- OR adaption on farm is too complex
- OR experts needed for implementation are missing

Operational Group ‘DD HACCP – Digital Dermatitis Telemedicine’

Ideas:

- Telemedicine to reach a broader audience → online platform
- Systematization of DD herd treatment

→ easier application in different surroundings/farms

- Building of a network of specialists needed to help implement changes

Operational Group ‘DD HACCP – Digital Dermatitis Telemedicine’

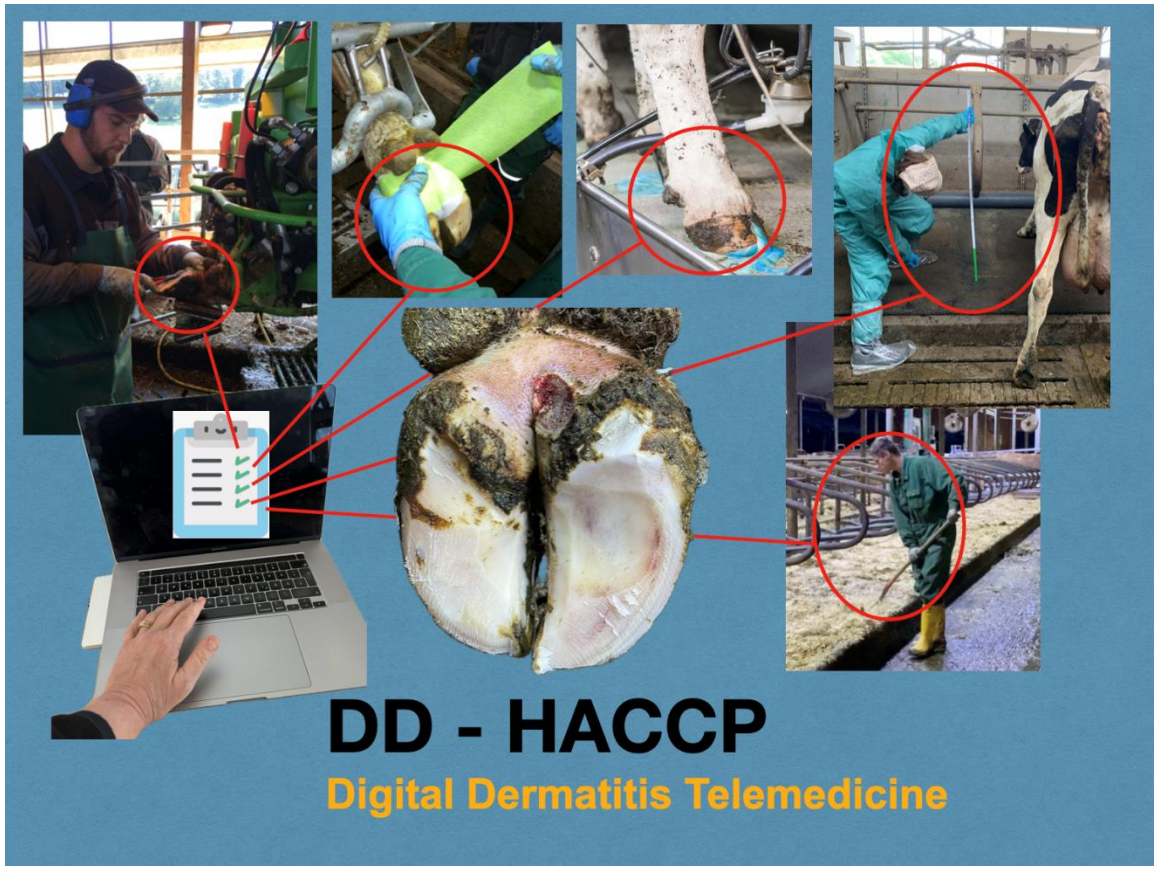
Results:

- collection of relevant and useful parameters for the application of the system
- Draft of the online platform‘s structure:
  - analysis tools, questionnaires, list of measures
  - Information on how to (e-learning, individual expert communication…)
  - Expert network, events (online and on site)
- Strong focus on usability and user eperience

Operational Group ‘DD HACCP – Digital Dermatitis Telemedicine’

- Ideas for future projects: still in the making of the current one
- Our offer:
  - Broad network in scientific and industrial environment
  - Extensive knowledge on cattle hoof health, husbandry and behavior
  - Great experience in practical application, scientific research and data analysis in the field

Operational Group ‘DD HACCP – Digital Dermatitis Telemedicine’



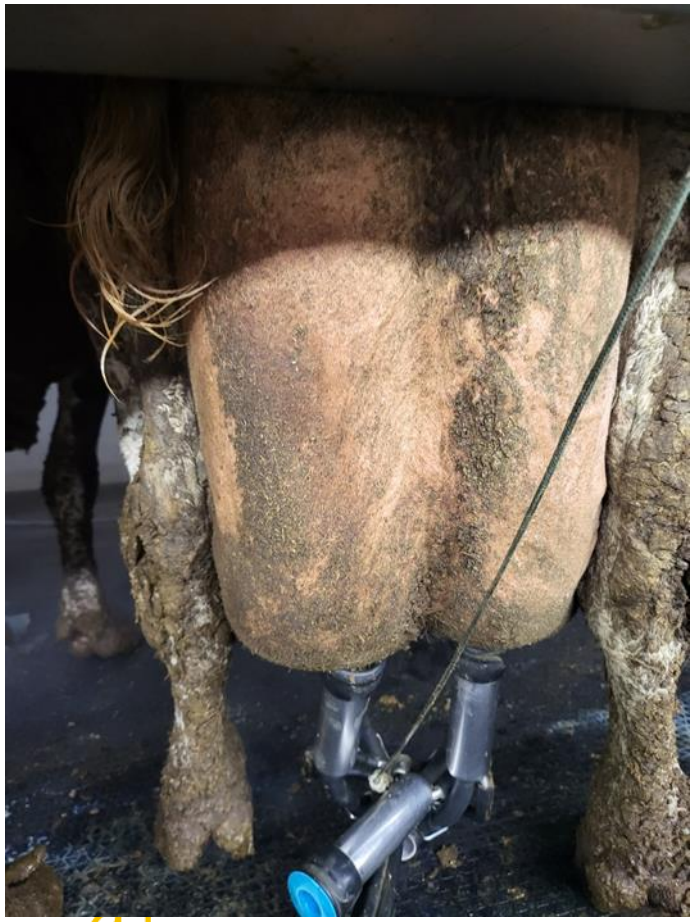
EIP-AGRI Operational Group project 'Tools that help to decrease mastitis cases and somatic cells count in the milk, decreasing antibiotics treatment for mastitis in the farms'

Edvardas Gedgaudas - Lithuania

Cross-visit 'Monitoring animal welfare' 8-9 May 2025

Operational Group Tools that help to decrease mastitis cases and somatic cells count in the milk, decreasing antibiotics treatment for mastitis in the farms

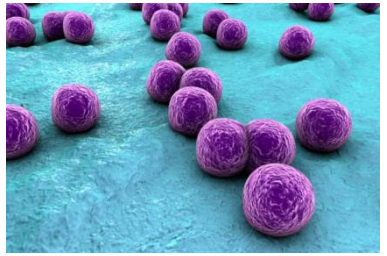
- **Country**: Lithuania
- **Start and end dates of the project:** 2022 -2024
- **Budget:** 150 000 €
- **Website/social media links:** https://www.zur.lt/
- **Partners:** (Chamber of Agriculture of the Republic of Lithuania and Vilniaus kolegija Higher Education Institution and 4 dairy farms Kubiliai, Atžalynas, Kairaitienė, Narausko)



OG: Tools that help to decrease mastitis cases and somatic cells count in the milk, decreasing antibiotics treatment for mastitis in the farms

- **Main challenge addressed by the project:** Decrease mastitis cases for cows and a new generation, less antibiotics
- **Innovative solutions developed / tested by the project:** Garlic boluses for dairy cows with high somatic cell count
- **Main results of the project:**

	Before treatment	After treatment
Average SCC	**1754** (n44)	**755** (n44)
	1818 (n14)	*922* (n14)
	1941 (n7)	*749* (n7)
	1781 (n24)	*605 (n24)*
	980 (n10)	*477* (n10)



- **What you are most proud of about your project / what makes your project special:** We help farmers to decrease somatic sells without antibiotics. It save money and help to keep animals more healhty.

Operational Group Tools that help to decrease mastitis cases and somatic cells count in the milk, decreasing antibiotics treatment for mastitis in the farms

- **Ideas for future projects or needs / issues based on which you want to build further collaboration:** Genomic test combine with mastitis cause.
- **What you can offer to future partners:** It is possible to reduce antibiotics in the farm and to more have healthy cows less antibiotics. Healthy cows more milk!

EIP-AGRI Operational Group project 'KipUP: the digital management tool for animal welfare and health'

Vera Bavinck - Netherlands

Cross visit 'Monitoring animal welfare' 8-9 May 2025

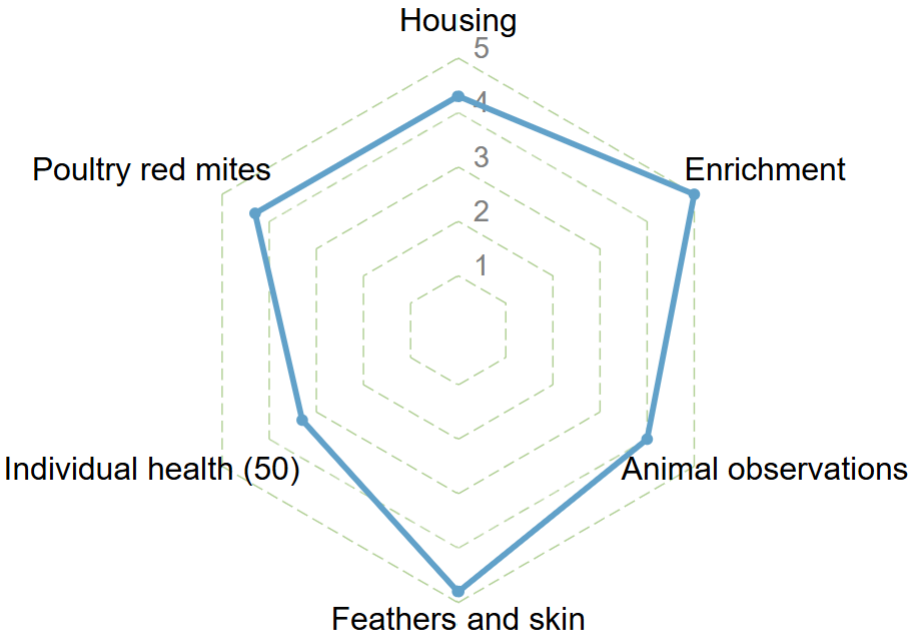
KipUP: the digital management tool for animal welfare and health

- **Location**: Netherlands
- **Period**: March 2022 - November 2024
- **Budget**: 157.464 €
- **Website:** www.Kipup.nl
- **Partners:** Fairpoultry and 3 poultry farmers: ‘Kipster’, ‘Boerderij het Paradijs’ and ‘Geluksvogel’

KipUP: the digital management tool for animal welfare and health

In short:

- Developed as a tool for a veterinary need to quantify welfare
- Monitoring poultry health in a practical way using a digital tool to visualize the result.
- Strong: The simplicity in its usage while addressing a complex issue: welfare



KipUP: the digital management tool for animal welfare and health

- Future music: Use KipUP in the transission from cage to cage-free
- What I can offer to future partners: extensive knowledge of laying hens health in combination with welfare.
- Use of KipUP. See: www.kipup.nl

KipUP: the digital management tool for animal welfare and health

EIP-AGRI Operational Group project 'Fermentfeed'

Łukasz Czech - Poland

Cross-visit 'Monitoring animal welfare' 8-9 May 2025

Operational Group `Fermenfeed’

- **Country**: Poland
- **Start and end dates of the project:** 01.01.2023 – 30.04.2025
- **Budget:** 399 196,85 €
- **Website/social media links:** http://fermenfeed.pl/
- **Partners:** 4 entities: a leader (Łukasz Czech, AgroWe), 2 farmers, and a Warsaw University of Life Sciences.

Operational Group ‘Fermenfeed’

- **Main challenge(s) addressed by the project:**

The project adres feed efficiency, animal welfare, and environmental impact. It aims to improve pig health and sustainability.

- **Innovative solutions developed / tested by the project**

It tests fermented feeds and an RFID-based AI system for monitoring pigs. Both aim to enhance welfare and optimize feeding

- **Main results of the project (intermediate or final)**

Early trials show improved digestibility and weight gain. Monitoring systems are under development with promising data.

- **What you are most proud of about your project/what makes your project special**

The project merges feeding innovation with real-time welfare tracking. It brings smart farming to practical livestock management.

Operational Group `Fermenfeed’

- **Ideas for future projects or needs / issues based on which you want to build further collaboration**

We are considering further work on early-life nutrition and precision feeding. We are also interested in stress reduction, support for natural behaviours, and developing new innovations in pig nutrition..

- **What you can offer to future partners**

We bring expertise in innovative feed design and behavior monitoring. Partners can benefit from our tech and field-testing experience.

EIP-AGRI Operational Group project 'MarblingMeat'

Stylianos Tamvakidis – Greece

Cross-visit 'Monitoring animal welfare' 8-9 May 2025

Operational Group ‘Marbling Meat’

- Greece
- 14/12/2022 – 30/5/2025
- 144.832,43€
- https://marblingmeat.gr/en, https://www.linkedin.com/company/100756299
- 4 Partners: Ergoplanning (Coordinator), Laboratory of Animal Production & Environmental Protection (Research Institute), Producers’ Group Omega Farms PC (Farmers), Qlab (Partner – Analytical Laboratory)

Operational Group ‘Marbling Meat’

- In Greece, beef cattle farming is mainly based on imported young animals with high growth rates, improved feed efficiency and desirable yield carcasses. However, the sector faces several economic challenges
- Technical and economic data of the involved farm, Random Sample of 64 intensively reared Black Angus beef cattle, Formulating different rations (Control C, n=32 and Treatment T, n=32) for improving marbling in produced meat, Feed residuals recordings, 64 meat samples from the 13th rib (quality assessment, physicochemical analyses), Comperative analysis, Organoleptic testing, Recording micro-climatic parameters
- Development and use of specific nutritional supplements in feeding of beef cattle could help to improve IMF deposition, resulting in added value for the final product
- Implementing innovative strategies that simultaneously apply nutritional and management factors to achieve desired IMF content without adverse impacts on animal health and welfare are considered essential for long-term sustainability of the sector.

Operational Group ‘Marbling Meat’

- The future of beef production depends on balancing quality with sustainability. Our goal is to develop advanced nutritional strategies that enhance intramuscular fat (IMF) deposition while maintaining animal health and production efficiency. By combining science with practical feeding solutions, we aim to improve meat quality and add value to the final product in a sustainable way.
- We offer expertise in beef cattle nutrition, feeding trials, and quality assessment. Our experience includes formulating specialized rations, conducting physicochemical and organoleptic analyses, and evaluating economic feasibility. Collaboration opportunities exist in research, data sharing, and developing sustainable solutions for high-quality beef production.

Operational Group ‘Marbling Meat’

EIP-AGRI Operational Group project 'Implementation of an Integrated Traceability System for Animal Products'

Vassilis Tsaprailis - Greece

Cross-visit 'Monitoring animal welfare' 8-9 May 2025

Greek Shorthorn Cattle Breeder's Association

OG: Implementation of an Integrated Traceability System for Animal Products

- **Country:** Greece
- **Start and end dates of the project:** 22.02.2023 – 31.12.2025
- **Budget:** 295.000,00€ (in total)
- **Website:** https://www.vrachikeratiki.gr/
- **Partners:** Agricultural University of Athens, University of West Attica, General Agricultural Cooperative of Ioannina, Agricultural Dairy Cooperative of Kalavrita, Genes and Nature Indigenous Breeds.

Greek Shorthorn Cattle Breeder's Association

OG: Implementation of an Integrated Traceability System for Animal Products

- **Main challenge addressed by the project:** Preservation of the Greek Shorthorn Cattle Breed through the development and marketing of high-quality, environmentally friendly products based on animal welfare and extensive grazing.
- **Innovative solutions developed / tested by the project:** Creation of new meat products (e.g. beef chips, sausages, burgers, meatballs, ready-to-cook meat pieces and salami) based on the Greek Shorthorn Cattle Breed farmed at remote mountain areas of the Greek countryside.
- **Main results of the project:** Determination of the quality characteristics of GS meat, through the analysis of a huge number of samples. Development of a network of selling points of the new products in various Greek cities & Promotion of the environmental role of extensive grazing, especially on its benefits to the biodiversity of open habitats (e.g. grasslands, shrublands, forest openings) and to the prevention of wildfires through the control of understorey vegetation.
- **What makes our project special can be summed on 3 points:** (1) a recently (2016) established Association of Breeders is actively participating to the national CAP dialogue, (2) through hard work, the Association and some of its members have entered the very competitive meat market based on a low-yielding autocthonous breed, (3) the environmental benefits of extensive grazing attract much interest from consumers and the scientific community.

Greek Shorthorn Cattle Breeder's Association

OG: Implementation of an Integrated Traceability System for Animal Products

- **Ideas for future projects or needs / issues based on which we want to build further collaboration:** (1) need for a more nature-friendly CAP which will reward extensive farming systems, especially in remote areas where fewer people stay although resources in many cases are under-exploited, (2) establishment and certification of grass-fed products, produced by ruminants.
- **What we can offer to future partners:** (1) farmers and researchers willing to exchange knowledge on extensive breeding practices and production of new products, (2) guided visits to Greek Shorthorn Cattle Breed farms at various mountain areas of Greece including protected areas, (3) contacts with the Greek academic community working on rangelands, food technology and autochthonous breeds.

GENES & NATURE
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από το αγρόκτημα στο τραπέζι σας!

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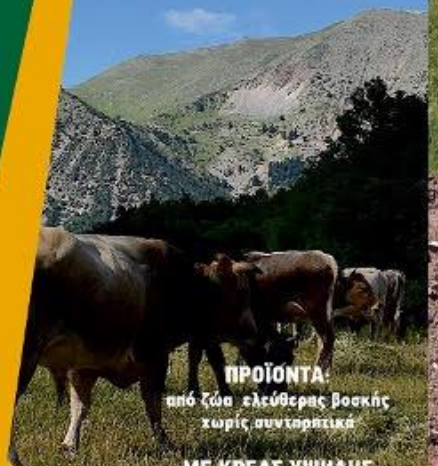
ΥΨΗΛΗΣ ΠΟΙΟΤΗΤΑΣ & ΔΙΑΤΡΟΦΙΚΗΣ ΑΞΙΑΣ

ΑΠΟΚΛΕΙΣΤΙΚΑ ΑΠΟ ΑΥΤΟΧΘΟΝΕΣ ΕΛΛΗΝΙΚΕΣ ΦΥΛΕΣ



ΠΡΟΪΟΝΤΑ:
από ζώα ελεύθερης βοσκής
χωρίς συντηρητικά

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EIP-AGRI Operational Group project ‘JuchowoMilk - Obtaining the highest quality biodynamic A2 hay milk’

Kinga Grodkowska - Poland

Cross-visit 'Monitoring animal welfare' 8-9 May 2025

Operational Group ‘JuchowoMilk - Obtaining the highest quality biodynamic A2 hay milk’

- **Country:** Poland
- **Project period:** 02/01/2023 to 20/12/2024
- **Budget:** 2 593 723,88 zł (620 470,63 €)
- **Website/social media links:**
  - https://www.ksowplus.pl/en/eip-operational-group?tx_wrobksowepi_epi%5Baction%5D=show&tx_wrobksowepi_epi%5Bcontroller%5D=EPIOperationalGroup&tx_wrobksowepi_epi%5BePIOperationalGroup%5D=863&cHash=d318a29599f07dc209e96b70aad055ba
  - https://www.juchowo.org/en/fundacja-im.-st.-karlowskiego.html
  - https://www.facebook.com/Juchowo
  - https://www.juchowomilk.pl/

Operational Group ‘JuchowoMilk - Obtaining the highest quality biodynamic A2 hay milk’

Partners:

1. Szkoła Główna Gospodarstwa Wiejskiego w Warszawie (Warsaw University of Life Sciences)
2. Spółka Rolnicza Juchowo,
3. Fundacja im. Stanisława Karłowskiego,
4. Vivende sp. z o.o,
5. Stowarzyszenie Demeter-Polska,
6. Zachodniopomorski Ośrodek Doradztwa Rolniczego w Barzkowicach,
7. Arkadiusz Robert Malarski

Operational Group ‘JuchowoMilk - Obtaining the highest quality biodynamic A2 hay milk’

- **Main challenge addressed by the project**
  - genotyping of the cow herd
- **Innovative solutions developed / tested by the project**
  - hay drying technology system
- **Main results of the project**
  - providing high quality organic and biodynamic hay A2 milk
- **What you are most proud of about your project/what makes your project special**
  - Involvement of multiple teams from different disciplines to create a sustainable, close-to-nature milk production system

Operational Group ‘JuchowoMilk - Obtaining the highest quality biodynamic A2 hay milk’

- **Ideas for future projects or needs / issues based on which you want to build further collaboration**
  - improving the quality and performance of milk while maintaining the highest level of animal welfare the;
  - use of AI and machine learning in cattle breeding and milk production
- **What you can offer to future partners?**
  - scientific and research facilities:
    - 2 cow heards (PHF and BS organic and biodynamic; PHF conventional high-productive);
    - milk quality assessment laboratories

Operational Group ‘JuchowoMilk - Obtaining the highest quality biodynamic A2 hay milk’

EIP-AGRI Operational Group project 'Zeras – Digitization of the company (Dairy cattle farm)'

Miroslav Bajbár - Czechia

Cross-visit 'Monitoring animal welfare' 8-9 May 2025

Operational Group ‘Zeras - Digitization of the company’ *(Dairy cattle farm)*

- **Country:** Czech Republic (CZ)
- **Start and end dates of the project:** 01/10/2023 – 30/11/2026
- **Budget:** (approx.) 650 000 €
- **Website:** www.AgroSoftHelp.cz, www.Zeras.cz
- **Partners:** 5 (five partners)

1. Zeras, a.s. – Agricultural company *(Dairy cattle and Crop production)*, **2. Compas Automatizace, Ltd.** – Software company, **3. Authoria, Ltd.** – Coordination, Consultant, **4. Ing. Miroslav Bajbar, Ph.D.** – Broker of EIP OG, Advisor, **5. Mendel university in Brno** – Scientific and research institution *(and other international farms, companies, universities, science and research institutions, Ministry of agriculture CZ, EU, etc.)*.

Operational Group ‘Zeras - Digitization of the company’ *(Dairy cattle farm)*

- **Main challenges addressed by the project:** Creation and development of a SW control system that will integrate and monitor the operation of individual technological equipment on a dairy cattle farm (1 877 hectares, 1 580 cows).
- **Innovative solutions developed / tested by the project:** New software for integration of all systems on the dairy farm, Digitization, Animal welfare, AI,
- **Main results of the project:** Digitalization of a dairy farm, Creation, integration and next development of a control system that will monitor and manage the operation of individual technological equipment, …
- **What you are most proud of about your project/what makes your project special:** Totally new individualy digital solution for the whole, very big, dairy farm, …

Operational Group ‘Zeras - Digitization of the company’ *(Dairy cattle farm)*

- **Ideas for future projects or needs / issues based on which you want to build further collaboration:** New ideas for digitization, better animal welfare and health, environment, SW integration (especially cattle and/or pig farms), International communications with members of Operational Groups etc. (experince, results, possibilities for the future, ...),
- **What you can offer to future partners:** Education and experience in livestock production, Advisor (especially for Pig producers), EIP Broker (from 2017), International SW cooperation (AgroSoft DK / AgroVision NL), Long-term coperation with agricultural companies, universities, ministry of agriculture, research institutions etc. in CZ and SK, Folow-up to my last participation in EU CAP („Animal welfare and innovation“, Hannover, 2023), etc.

Operational Group ‘Zeras - Digitization of the company’ *(Dairy cattle farm)*

EIP-AGRI Operational Group project FeedImproved

Julia Gęsicka - Poland

Cross visit 'Monitoring animal welfare' 8-9 May 2025

Operational Group FeedImproved

The FeedImproved is being developed in Poland between **January 2023 and April 2025**, with a total budget of **over 2.4 million PLN** (~570,000€). The initiative is led by a strong partnership between the **Warsaw University of Life Sciences** and a **innovative farm** owned by Łukasz Czech.

With both academic excellence and practical experience at its core, the project reflects a closecollaboration between science and farming practice. Our activities are grounded in real production conditions, supported by a committed network of farmers ready to engage in innovation and cross-border cooperation.

Further details and project updates are available at: **https://feedimproved.pl/**

Operational Group FeedImproved

• Innovative solutions

FeedImproved combines feed innovation with sensor technology. We're testing sprout-based additives, grape flour, turmeric, and herbs like thyme or oregano to improve gut health and reduce stress. A real-time monitoring system measures air quality and emissions in barns, helping adjust conditions to animals' needs. Integrated approach targets welfare from both inside and outside - through what animals eat and how they live.

• Main challanges

In pig farming, small changes in nutrition or environment can deeply affect animal well-being. FeedImproved responds to the need for smarter, more compassionate systems - where feed not only fuels growth, but also supports natural behavior and reduces stress. At the same time, we face the challenge of nutrient waste and emissions. By combining tailored feed with real-time monitoring, we work toward solutions that respect both animals and the environment.

Operational Group FeedImproved

- **Main results**

We developed and tested feed with lyophilized fermented sprouts in six variants. Early results show improved feed conversion, better protein absorption, and reduced nitrogen and phosphorus excretion—supporting gut health and lowering environmental stress. NIR manure analysis confirmed higher dry matter content, indicating improved digestion. Behavioral observations suggest reduced stress and competition at feeders. We also prototyped a sensor system for real-time monitoring of CO_2, NH_3, CH_4, and airflow in pig housing. This supports better air quality and reduces respiratory strain. Overall, results point to improved animal welfare and more sustainable production.

- **What we are proud of**

We are proud to pioneer an innovative, science-based approach to animal welfare in pig farming. Our fermented sprout feed boosts gut health, reduces metabolic and environmental stress, and respects natural animal behaviors. We're also developing real-time sensor systems that improve air quality and housing conditions. By combining precision farming with ethical values, we're building a new standard for sustainable and responsible livestock production.

Operational Group FeedImproved

• Our ideas for future

We would like to build on our current research by developing precision feeding systems that adapt in real-time to individual animal needs and behavior, using sensor and AI technologies. Future collaborations could focus on cross-species welfare strategies, especially in challenging production systems. We are also interested in co-developing open-source tools for welfare monitoring and nutrient management, as well as exploring climate-adaptive solutions for housing systems. Integrating environmental, nutritional, and behavioral data could drive a new generation of welfare-centered farming innovations across Europe.

• What we can offer

We offer a unique combination of scientific expertise, on-farm experience, and strong stakeholder engagement. Our team includes experienced advisors, researchers, and technical experts in animal nutrition, environmental monitoring, and welfare-focused livestock systems. Beyond that, we work closely with a growing network of farmers who are actively engaged in innovation and eager to participate in transnational collaboration. We bring access to pilot farms, advanced feed and sensor testing infrastructure, and validated protocols for on-farm data collection. We are happy to share our knowledge, tools, datasets, and field-tested methods, and are open to joint development of precision farming solutions, co-creation workshops, training programs, and demonstration activities across the EU.

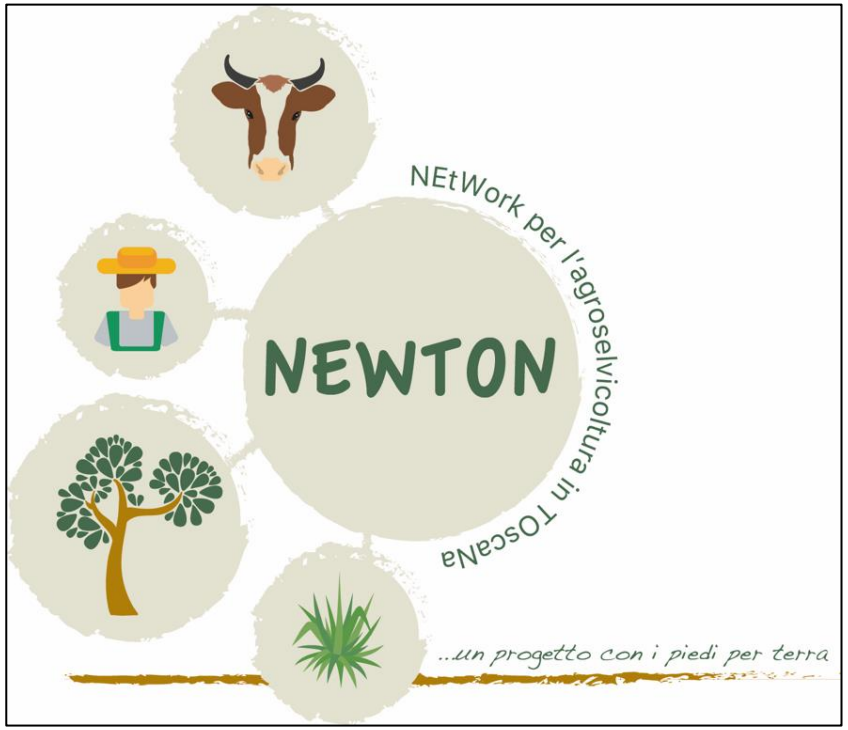
EIP-AGRI Operational Group project NEWTON: Agroforestry in Tuscany

Alberto Mantino - Italy

Cross visit 'Monitoring animal welfare' 8-9 May 2025

Operational Group
NEWTON – AGROFORESTRY NETWORK IN TUSCANY

- **Where?** Italy – **Tuscany Region**
- **When?** 01.12.2019 – 31.01.2023
- **Budget:** 363.282,75 €
- **www.gonewton.it – Facebook page**
- **Partners: 3** farms, **2** universities, **2** research entities, **1** education agency, **1** certification company



Operational Group NEWTON

Main challenge(s) addressed:

Enhancing the sustainability of agrosilvopastoral systems in the Mediterranean under climate change.

Balancing livestock performance, biodiversity, and carbon sequestration.

Innovative solutions developed/tested:

Agroforestry-based livestock management to mitigate heat stress and optimize grazing.

First European agroforestry certification system.

Main results:

Improved cattle welfare and performance in summer under tree cover.

Agroforestry compensate CO_2 emissions by up to 64% of an extensive agrosilvopastoral farm.

Established a stakeholder knowledge network and Agroforestry School.

What makes the project special:

A unique integration of traditional knowledge with cutting-edge sustainability strategies, fostering real-world agroforestry adoption and certification.

Operational Group NEWTON

Ideas for future projects / collaboration needs:

Expanding agrosilvopastoral models to different Mediterranean and European contexts.

Enhancing carbon sequestration strategies and climate resilience in agroforestry.

Developing digital tools for precision agroforestry management.

Strengthening certification schemes and market access for agroforestry products and carbon farming.

What we can offer to future partners:

Expertise in agroforestry systems, livestock-environment interactions, and carbon balance assessment.

Access to demonstration sites and long-term monitoring data.

Certification frameworks for sustainable agroforestry.

A well-established network of researchers, farmers, and policymakers for knowledge exchange.

Operational Group NEWTON

EU CAP NETWORK

Cross-visit 'Monitoring animal welfare' 8-9 May 2025