



LISA BALDI

WORK EXPERIENCE

 **University of Parma** – Parma, Italy

Adjunct Professor & Researcher in Modelling Agricultural Policies

[1 Oct 2023 – Current]

Elective, cross-disciplinary course unit, Laurea Magistrale (Master's Degree), University of Parma (UNIPR)

- Designed and delivered the course unit "Modelling Agricultural Policies," an elective, cross-disciplinary module open to Master's degree students
- Provided students with an overview of the EU Common Agricultural Policy (CAP), including its financing mechanisms and its evolution towards greater environmental integration
- Developed students' theoretical and practical skills in mathematical programming for analysing the impact of agricultural and agri-environmental policies at farm level
- Taught the rationale and methodology for ex-ante evaluation of agri-environmental policies
- Delivered lectures on the theory of mathematical programming applied to agricultural economics
- Guided students in building mathematical programming models using commercially available software, including Excel and GAMS
- Combined theoretical instruction with hands-on modelling exercises to strengthen students' applied policy-analysis competencies.

 **University of Parma** – Parma, Italy

Research Fellow - Agent-Based Modelling of EU Agricultural Policy Impacts

[1 Feb 2025 – Current]

Department of Chemistry, Life Sciences and Environmental Sustainability (SCVSA), University of Parma (UNIPR), Italy

- Conducting research on "Analysis of the environmental impacts of EU agricultural policies through the agent-based model AGRISP", within the scientific-disciplinary sector AGRI-01/A (Agricultural, Food and Rural Appraisal Economics)
- Developing and applying the AGRISP agent-based model to simulate and assess the environmental consequences of EU Common Agricultural Policy (CAP) measures at farm and territorial level
- Analysing policy scenarios to evaluate trade-offs between agricultural production, farm economic performance, and environmental sustainability outcomes
- Contributing to the C+AgroForER project (co-funded by the European Union through Emilia-Romagna Regional funds), focused on the sustainable management of agroforestry systems, soil quality, ecosystem services and carbon sequestration in the Emilia-Romagna region
- Producing scientific outputs (reports, data analyses, presentations) and lecturing at conferences to support academic and project-related dissemination.

 **Parma Sostenibile** – Parma, Italy

Primary Investigator - PANACEA Project

[1 May 2026 – Current]

The PRIMA project PANACEA promotes the adoption of a healthy, sustainable, local Mediterranean diet during the perinatal period, which encompasses pregnancy and the first four months after birth. Based on the

experience developed with Mercatiamo, Parma Sostenibile's role in PANACEA is to design and deliver short food supply chain (SFSC) strategies and foster local sustainable transitions and citizen empowerment through place-based food and sustainability campaigns.

Main responsibilities:

- Define and oversee the scientific direction of our team's tasks and deliverables.
- Ensure quality and integrity of research outputs and data.
- Contribute results to the consortium's shared objectives.
- Supervise and coordinate the work of our project coordinator and researcher.
- Manage our team's budget and ensure compliance with PRIMA and national funding rules.
- Report scientific and financial progress to the consortium at agreed milestones.
- General Assembly Representative.

Parma Sostenibile – PARMA, Italy

Website: <https://www.parmasostenibile.it/>

President and Co-founder

[Sep 2014 – Current]

- Provide strategic leadership and governance for a non-profit association promoting sustainable production, lifestyles, and business models.
- Oversee overall management, including financial planning, fundraising, institutional relations, and public tenders.
- Manage human resources, coordinating staff, volunteers, and multi-stakeholder project teams.
- Ensure organisational sustainability through diversified funding, participatory governance, and impact assessment.
- Guide strategic partnerships with local institutions, universities, and civil society to advance agroecology and sustainable food systems.
- Launched MercaTiAmo (2014), engaging ~30 organic farmers through weekly markets under a Participatory Guarantee System (IFOAM-based).

Distretto Parma Bio Valley – Parma, Italy

Website: <https://www.parmabiovalley.it/>

Treasurer and Project Manager

[1 Nov 2024 – 31 Jan 2025]

Served as Treasurer, overseeing financial management, budgeting, and administrative compliance for the association.

Coordinated the activities related to a project funded by the Emilia Romagna Region, aiming at:

- Design and implementation of a promotional campaign for the Parma Bio Valley District
- Design and development of a web platform.

University of Parma – Parma, Italy

Link <https://agricore-project.eu/>

H2020 Project Coordinator

[31 Aug 2021 – 30 Jun 2024]

- Oversaw operational management, monitoring, and control of the Horizon 2020 project AGRICORE, assessing the economic and environmental impact of agricultural and environmental policies.
- Conducted research and characterisation of socio-economic datasets, coordinated researchers and interns, and contributed to the development of the Agricultural Research Data Index Tool (ARDIT), including governance design, ontology alignment, and data processing workflows.
- Supported the creation of a recursive, positive-normative, non-linear agent-based model and related interfaces.
- Disseminated project results, engaged policymakers, and achieved recognition as Subject Matter Expert, ensuring continued involvement as a stakeholder in line with PhD research.

DOCOMO Digital, Milan (docomodigital.com) – Parma, Italy

Project Manager

[31 Mar 2015 – 30 Dec 2016]

Managed the data migration from SharePoint 2007 to a highly customised version of on-line SharePoint 2013, covering all phases of the project life cycle, from requirement gathering, development, migration and go-live, dealing with internal stakeholders and suppliers, reporting to upper management; planning and budget tracking.

 **"The Brussels Blue Economy Group" – Brussels, Belgium**

Project Manager

[Apr 2013 – Jun 2014]

No-profit think tank striving to ensure a transition to a society producing more well-being based on a sustainable economy

- Organised of a Blue Economy [training](#), supported by the [ZERI](#) Foundation
- Facilitated the monthly meeting on different sustainability subjects

 **CGI ([cgi.com](#)) – Brussels, Belgium**

Senior Consultant

[Mar 1999 – Oct 2012]

Several internal and external assignments, varying from Business Analyst to Product Manager, Project Manager and Team Manager, filling positions of increasing management responsibility, acquiring extensive expertise in all phases of the project lifecycle. Most relevant:

- CRM Team Manager at Belgacom (now [www.proximus.be](#)): leading a team of approx. 25 people on site and offshore. Team Mission: managing and controlling the CRM applications (e-services and customer support) following the ITIL methodology, guaranteeing stability and high level of performances.
- Project Manager: manage from scope definition to implementation of a project aiming at fully integrating fix line customers into a loyalty platform. This project served as pilot for the implementation of a new (at the time) agile software development methodology.
- Product Manager at Proximus managing from conception to "go to market" of promotions targeting residential customers: gathered requirements, assessed feasibility and followed up on technical implementation. In charge of long-term project implementations, process improvements and redesign.
- University Relationship Manager, filling strategic recruitment needs and developing relationships with selected campuses across Europe.

 **Career International ([careersinternational.com](#)) – Brussels, Belgium**

Consultant

[Sep 1995 – Apr 1999]

As Project Manager: planning and organisation of international recruiting events in Milan, Moscow and Vienna (approx. 30 companies and 500 pre-selected candidates). Additional tasks included marketing the project and coordinating the attraction campaign (negotiated partnership agreement with 13 media in the region) by establishing contacts and networking with universities in Eastern Europe. Choosing and managing suppliers, liaising with clients and coordinating the sales team at European level.

As Business Development Manager: sole responsible of the commercialisation of EMDS services in Italy.

EDUCATION AND TRAINING

PhD in Agricultural Economics

Università degli Studi di Firenze and Parma - Department of Chemistry Life Sciences and Environment [31 Oct 2021 – 9 May 2025]

Address: Via Kennedy 6, 43125 Parma (Italy) | **Website:** <https://www.unipr.it/> | **Field(s) of study:** Ecology and Agricultural Economics | **Thesis:** Predicting the effect of the Common Agricultural Policy (CAP) measures on the supply of ecosystem services (ESS) through positive agent-based modelling.

Winner of a Research Doctorate-Ph.D. grant in Ecology from the University of Florence, in collaboration with the University of Parma, Department of Chemistry, Life Sciences and Environmental Sustainability. Her research project focuses on predicting the effect of the Common Agricultural Policy (CAP) measures on the supply of ecosystem services (ESS) through positive agent-based modelling.

Master's Degree in Science and Technology for the Environment and Resources

Università di Parma [Aug 2018 – 22 Apr 2021]

Address: Parco delle Scienze, 43124 PARMA (Italy) | **Website:** <https://cdlm-star.unipr.it/en> | **Field(s) of study:** Natural sciences, mathematics and statistics: • Environmental sciences • Earth sciences • Natural environments and wildlife | **Final grade:** 110/110L | **Level in EQF:** EQF level 7 | **NQF Level:** Laurea Magistrale | **Type of credits:** ECTS | **Number of credits:** 120 | **Thesis:** The Water Footprint of organic supply chain and quality food chains (Food Quality Schemes)

Economic Modelling and Environmental Policy: she acquired the needed skills to analyse and solve problems related to policy measures, using economic models based on the use of mathematical programming and specific software (GAMS). She developed knowledge of methods and operational tools for assessing the economic relationships between economic activities, production and consumption, and environmental resources. Applying optimisation techniques and Cost-Benefit Analysis, she tackled environmental policies assessment, with reference to the behaviour of economic agents.

Ecology, Environmental Impact and Resource Management: In the field of ecosystem ecology, ecosystem services and ecological regeneration, she studied environmental assessment techniques and management of complex problems that have major implications for human society and human activities. For her master's thesis, in context of the H2020 project "Strength to Food", she carried out a comparative research assessing the grey water footprint of food products issued from different agronomic practices, to compare their impact on water resources, considering pollutants such as pesticides and nutrients (nitrogen and phosphorus).

Bachelor's Degree in Natural and Environmental Sciences

Università di Parma [Aug 2015 – Jul 2018]

Address: Parco delle Scienze, 43124 PARMA | **Website:** <https://cdl-sna.unipr.it/en> | **Field(s) of study:** Natural sciences, mathematics and statistics: • Environmental sciences | **Final grade:** 102/110 | **Level in EQF:** EQF level 6 | **NQF Level:** Laurea Triennale | **Type of credits:** ECTS | **Number of credits:** 180 | **Thesis:** Small reservoirs as a measure of adaptation to water scarcity: hydrological and ecological aspects.

- Biology, Zoology and Botanic
- Chemistry and Physics
- Ecology
- Geology, Mineralogy and Earth Science

Master's Degree in Political Sciences and International Economics

Università degli Studi di Milano [Sep 1989 – Oct 1995]

Address: Via Festa del Perdono 7, 20122 Milan (Italy) | **Website:** <https://www.unimi.it/en> | **Field(s) of study:** Social sciences, journalism and information: • Economics • Political sciences and civics | **Level in EQF:** EQF level 7 | **NQF Level:** Laurea (vecchio ordinamento) | **Thesis:** International direct investment in China

In this course Mrs. Baldi analysed and interpreted the economic, financial and political context in which national and international decisions are taken, both by public organisations and by private firms and organisations;

Political Science: she gain knowledge in political architecture, history, economical and legal origins; she learnt about the mechanisms behind the functioning of complex international organisations, the basis of sociology and decision-making processes at the European level, and dynamics of European Relationships.

International Economics: she acquired knowledge and skills in the fields of theoretical (micro and macro economics) and applied international economics, real and monetary public policies regulations and economic conditions. She also studied private, public and European law. In depth mathematical and statistical skills have been acquire though exams of analysis, financial mathematics and statistics.

PUBLICATIONS

[2026]

Reflections on linking economic equilibrium models with agent-based models in the context of land use Linking computable general or partial equilibrium models with agent-based models can combine the strengths of both

modeling concepts. The linking allows to trace global feedback effects while providing a flexible representation of human behavior and social interactions. This linking would facilitate the simulation of interconnected land-use and economic systems while accounting for actors' heterogeneity, their specializations, and the representation of alternative decision models. In this paper, we examine the challenges that currently hinder the realization of these potential benefits and present a roadmap outlining possible solutions for successful model linking in the context of land use change. The main challenges include: 1) conceptual misalignment between modeling concepts, 2) differences in scales and resolution, 3) difficulties in validation and calibration of linked models, 4) increased complexity in interpreting and communicating results, 5) high demands on computational infrastructure and computational costs, and 6) limited personnel and financial resources. Successfully linking different model concepts and overcoming these challenges requires the modelling communities and stakeholders to engage in long-term, platform-supported dialogue. This dialogue could facilitate the development of a shared framework for model linking, standards for model documentation, validation procedures, and appropriate approaches for communicating and evaluating results. This process will enhance the benefits and sustain the linked models while helping determine circumstances in which the advantages of linking models may outweigh the costs.

Authors: Schmidt, A.; Appel, F.; Arfini, F.; Argueyrolles, R.; Baldi, L.; Filatova, T.; Finger, R.; Ge, J.; Grujić, N.; Heckelei, T. et al. | **Journal Name:** Socio-Environmental Systems Modelling | **Volume, Issue and Pages:** 8, 18872 | **Publisher:** International Environmental Modelling and Software Society

[2025]

How Milk Quotas and the CAP Affect GI Systems: The Case of Parmigiano Reggiano PDO Milk quota policies in the European Union have long shaped dairy production, but their transformation into a tool restricted to Geographical Indications (GIs) raises new concerns about their effects on GI agricultural and rural systems. After encompassing the historical reasons that led to the new policy framework this study assesses the economic, environmental, and social impacts of quotas management under the greening measures of the Common Agricultural Policy 2023-2030. This is carried out by applying an ex-ante analysis using the AGRISP model, which combines Positive Mathematical Programming with Agent-Based Modeling. The case study of the Parmigiano Reggiano PDO is considered. Simulation results show that, while quotas increase production volumes and efficiency and do not strongly hinder marginal activities, they worsen farmers' profits and environmental outcomes compared to a no-quota scenario. This paper provides a comprehensive analysis of the current milk quota policy in a production context underexplored in recent literature.

Authors: Giannechini, A., Baldi, L., Donati, M., & Arfini, F. | **Journal Name:** Bio-Based and Applied Economics.

[2024]

Predicting the effect of the Common Agricultural Policy post-2020 using an agent-based model based on PMP methodology The objective of this study is to perform an ex-ante assessment of the potential impacts of agro-environmental measures included in the post-2020 Common Agricultural Policy (CAP), by estimating farmers' responsiveness in adopting organic agricultural practices and an eco-scheme that incentivises extensive forage systems. This research is conducted by means of an Agent-Based Model (ABM), based on Positive Mathematical Programming (PMP), implemented in GAMS. The ABM facilitates the simulation of interaction among farmers, allowing for an analysis of farm heterogeneity. The PMP methodology adds a non-rational dimension to the farmers' economic drivers. The model is calibrated using 2019 Farm Accountancy Data Network (FADN) data specific to the Emilia Romagna region in Italy. Our findings reveal significant impacts on land use, with a notable decrease in cereal cultivation in favour of protein and fodder crops. Moreover, structural shifts are observed, notably a decrease in the number of small-scale farms. We also assess environmental and economic implications, observing a modest reduction in CO₂ equivalent emissions per hectare, an increase in water demand, and an overall economic stability among farms, as indicated by changes in gross margin per hectare.

Authors: Baldi L., Calzolari S., Arfini F., Donati M.

Baldi, L., et al (2024). Bio-Based and Applied Economics, 13(4), 333–351. <https://doi.org/10.36253/bae-14592>

[2023]

An Impact Assessment of GHG Taxation on Emilia-Romagna Dairy Farms through an Agent-Based Model Based on PMP The aim of this work is to assess the structural, production, environmental, and economic impact of an increasing tax on climate change gas emissions related to milk production under the current CAP payment system. The analysis is performed using an Agent-Based Model (ABM) based on Positive Mathematical Programming (PMP). The integration between ABM and PMP makes it possible to simulate farmers' strategies considering the interaction between them, the territorial specificity, and the heterogeneity of farms in the presence of little information on production costs. It also makes it possible to add a social and cultural perspective to the economic factors. The model is calibrated using FADN data for the Emilia-Romagna region (Italy) from the year 2020. The results show that farmers belonging to different age groups make decisions based on economic profitability, but also

on their social and cultural background. To maximise their utility functions, farmers can opt for more efficient agricultural management practices that may result in the exchange of production factors, especially land. The overall impact penalises less efficient farms and agricultural production with higher negative externalities.

Write here the description...

Authors: Baldi, L.; Arfini, F.; Calzolari, S.; Donati, M.

Baldi, L. et al. (2023) Land, 12, 1409. <https://doi.org/10.3390/land12071409>

[2023]

Economic Impact of Short Food Supply Chains: A Case Study in Parma (Italy) Short food supply chains (SFSCs) are advocated as strategies to improve the sustainability of the agro-food system. The recent literature claims that SFSCs are examples of social experimentation and innovation. By scaling up the positive elements of niche alternative food networks, SFSCs can serve as a basis for changing the overall agri-food system. However, their economic impact remains a matter of debate. Local multiplier methods have been used to measure the economic impact of economic sectors at a regional scale. In the case of SFSCs, multiplier methods need to be developed at a local scale and are highly data demanding. This analysis measures the local financial flow created by the MercaTiAmo project by applying the Local Multiplier 3 (LM3) method. MercaTiAmo is organized by a group of citizens and farmers and arranges farmers' markets three days per week in the city of Parma (northern Italy). To measure the financial flow created by the initiative, data were collected from 10 farmers representing 70% of the farmers participating in the project. The method takes into account the total annual turnover (Round 1), the local expenses of the farmers (Round 2), and the local expenses of the farmers' suppliers (Round 3). The results suggest that farmers with a higher turnover (Round 1) and percentage of direct expenses in the local area (Round 2) also show higher values of LM3, thus suggesting a higher economic impact, while Round 3 does not affect LM3. The novelty of the study relies on the fact that here the local multiplier method is applied for the first time at the farm level, providing precise information and data on farmers' upstream supply chain, which can be used to inform policymakers and initiators of SFSCs. Moreover, the study provides a detailed description of the main categories of costs for farmers and which categories of costs are more suited to be locally based. For this reason, the study contributes to the debate on the economic impact of SFSCs in the local area. The method can also be used to provide information to consumers on the economic impact of alternative food networks and local food production. Write here the description...

Authors: Filippini R.; Arfini F.; Baldi L.; Donati M.

Filippini R. et al. (2023) Sustainability, 15, 11557. <https://doi.org/10.3390/su151511557>

[2023]

The European agro-economic model AROPAj This publication presents the European agro-economic AROPAj model. Throughout recent years the model has been adapted to suit FADN data and the expansion of the European Union (EU). The revised model, which is presented here, is based on the same principles, model lies in the evolution of computing capacities and facilities, especially when new scientific problems arise. The starting premise of the model resulted from the combination of different factors, namely new policy tools announced to be implemented by the changing Common Agricultural Policy (CAP), the need to account for a wide diversity of farming systems, and the changing geographical area following the EU enlargement.

[2022]

Participatory Guarantee Systems (PGS): a tool to improve the effectiveness of Geographical Indications in short food supply chains; the case of Parma Bio-district Conference Paper

Maccari M., Guareschi M., Baldi L. Mancini M., Arfini F.

OTHER EDUCATION AND TRAININGS

[25 Sep 2023 – 28 Sep 2023]

CAPRI TutorApplied Data Analysis: Introduction to and Application of the Partial Equilibrium Model CAPRI in Market and Policy Analysis

Thünen Institute

[6 Sep 2023 – 8 Sep 2023]

Introduction to GAMS Modelling Language

Thünen Institute

[Dec 2012 – Jun 2013]

Diplôme en Gestion du Développement Durable

ICEHC

Boulevard Brand Whitlock 4, Brussels

Main subject / occupational skills covered:

- Stratégie d'entreprise – (Social Responsibility Management)
- Economie Verte
- Philosophie et environnement
- Norme ISO 26000
- Biomimétisme

Link: <https://www.ichec.be/fr>

[Aug 2006 – Mar 2007]

International Diploma in Business Analysis by BCS

The Chartered Institute for IT

Main subject / occupational skills covered:

- Business Analysis Practice
- Requirement Engineering
- Business Change
- Modelling Business Processes

Link: <https://www.bcs.org/>

[Dec 2004 – Jun 2005]

ITIL Foundation Certificate

ITIL (Information Technology Infrastructure Library)

Main subject / occupational skills covered:

IT Service Management Best Practice

[Jan 2002 – May 2002]

Project Management Foundation

CGI - Corporate training

Link: www.cgi.com/en

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

French

LISTENING C1 READING C1 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Microsoft Excel / Microsoft Word / Outlook / Microsoft Powerpoint / Google Drive / Skype / Facebook / Zoom
/ Google Docs / LinkedIn / Microsoft Office