

Fabienne FEMENIA

Researcher

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Education

- 2010 *PhD in Economics*, University of Rennes 1, with Honours
Title Common Agricultural Policy and Stabilization of European Agricultural
Incomes and Markets
Advisor Alexandre Gohin, Research Director at INRA
Funding INRA and Pluriagri
Examinators Jesus Anton, Economist, OECD
Antoine Bouet, Professor, University of Pau
Alexandre Gohin, Research Director, INRA
Jean-Christophe Poutineau, Professor, University of Rennes 1
Lionel Ragot, Professor, University of Lille 1
- 2004 *Master's Degree in Statistics*, University of Rennes 2, with Honours

Research Topics

Micro-economic modelling of agricultural production choices, Applied Micro-econometrics

Professional Experience

- Since 2013 *Researcher*, INRAE, UMR SMART, Rennes
- 2011-2012 *Post Doctoral Fellow*, IFPRI (International Food Policy Research Institute), Washington DC, USA
- 2006-2007 *Economist*, INRA, Unité d'Economie et Sociologie Rurale, Rennes

Participation in Research Projects

- 2023-2027 EU Horizon Europe project No. 101060075 , BrightSpace, "Designing a Roadmap for Effective and Sustainable Strategies for Assessing and Addressing the Challenges of EU Agriculture to Navigate within a Safe and Just Operating Space", member of the French team
- 2021-2026 French Priority Research Program *Growing and Protecting crops Differently*, FAST, "Facilitate public Action to exit from peSTicides", member of the project board and work package leader
- 2019-2023 EU H2020 project No. 817566, MIND STEP, "Modelling Individual Decisions to Support the European Policies related to Agriculture", member of the French team and task leader
- 2018-2022 EU H2020 project No. 770747, LIFT, "Low-Input Farming and Territories", member of the French team
- 2008-2010 EU FP7 project No. 212036, AgFoodTRAdE, "New Issues in Agricultural, Food and Bioenergy Trade", member of the French team
- 2006-2007 EU FP6 project No. 513666, TradeAg, "Agricultural Trade Agreements", member of the French team

Supervision of PhD Students

- 2017-2022 Co-supervisor of Ibirenoye Romaric Sodjahin (with Alain Carpentier) *Estimation of Crop Rotation and Crop Diversification Effects Based on Cost Accounting Data*
- 2014-2018 Co-supervisor of Obafemi Philippe Koutchade (with Alain Carpentier) *Unobserved Heterogeneity and Corner Solutions in Micro-econometric Models of Multi-crop Production Choices*

Teaching

- 2018-2023 Participation in Tutorials on Agricultural, Food and Trade Policies for Master Students at Agrocampus Ouest, Rennes, France
- 2006-2009 Guest Lectures on Agricultural policies, market risks and CGE modelling for last year Master Students in Statistics at University of Rennes 2, Rennes, France
- 2008 Guest Lecture on Agricultural market risks and Dynamic CGE modelling for last year Engineer Students in Agricultural and Ressources Policies and Markets at Agrocampus Ouest, Rennes, France

Miscellaneous

2020-2024 Elected member of the scientific council of INRAE Economics and social sciences division

2017-2019 In charge of SMART-LERECO seminars

2015-2017 Editor of the SMART-LERECO working papers series

2014 Co-editor of the SMART-LERECO working papers series

Peer reviewer of articles for *American Journal of Agricultural Economics*, *Ecological Economics*, *Economie Rurale*, *Empirical Economics*, *European Review of Agricultural Economics*, *European Review of Agricultural Economics*, *Review of Agricultural Food and Environmental Studies*, *German Journal of Agricultural Economics*, *Review of Development Economics*, *Science of the Total Environment*, *Agronomy for Sustainable Development*

Peer reviewer of papers submitted to *GTAP Annual Conference* (2014, 2017, 2020), *Journées de Recherches en Sciences Sociales* (since 2014), *Congress of the European Association of Agricultural Economists* (2017, 2020, 2023), *International Conference of Agricultural Economics* (2018)

Publications in peer reviewed journals

- 2024 Elodie Letort, Fabienne Femenia, “Responsiveness of farm investment to price changes : evidence from the French crop sector”, *European Review of Agricultural Economics*, 51(1), pages 185-213
- 2021 Fabienne Femenia, Laure Latruffe, Jean-Paul Chavas, “Responsiveness of farm investment to price changes : evidence from the French crop sector”, *Applied Economics*, 53(34), pages 3972-3983
- Obafemi Philippe Koutchade, Alain Carpentier, Fabienne Femenia, “Modeling Corners, Kinks, and Jumps in Crop Acreage Choices : Impacts of the EU Support to Protein Crops”, *American Journal of Agricultural Economics*, 103(4), pages 1502-1524
- 2019 Fabienne Femenia, “A Meta-Analysis of the Price and Income Elasticities of Food Demand”, *German Journal of Agricultural Economics*, 68(2), pages 77-92
- 2018 Obafèmi Philippe Koutchade, Alain Carpentier, Fabienne Femenia, “Modeling heterogeneous farm responses to European Union biofuel support with a random parameter multi-crop model”, *American Journal of Agricultural Economics*, 100(2), pages 434-455
- 2016 Fabienne Femenia, Elodie Letort, “How to significantly reduce pesticide use : An empirical evaluation of the impacts of pesticide taxation associated with a change in cropping practice”, *Ecological Economics*, 125, pages 27-37
- 2015 Fabienne Femenia, “The effects of direct storage subsidies under limited rationality : a general equilibrium analysis”, *Agricultural Economics*, 46 (6), pages 715-728
- 2013 Fabienne Femenia, Alexandre Gohin, “On the optimal timing of agricultural policy reform”, *Journal of Policy Modeling*, 35 (1), pages 61-74
- 2011 Fabienne Femenia, Alexandre Gohin, “Dynamic modelling of agricultural policies : the role of expectation schemes”, *Economic Modelling*, 28 (4), pages 1950-1958
- 2010 Fabienne Femenia, Alexandre Gohin, “Faut-il une intervention publique pour stabiliser les marchés agricoles? Une revue des arguments”, *Review of Agricultural and Environmental Studies/ Revue d’Etude en Agriculture et Environnement*, 91 (4), pages 435-456
- Fabienne Femenia, “Impacts of stockholdings behaviours on agricultural market volatility : a dynamic computable general equilibrium approach”, *German Journal of Agricultural Economics*, vol. 59(3), pages 187-201
- Fabienne Femenia, Alexandre Gohin, Alain Carpentier, “The decoupling of farm programs : Revisiting the wealth effect”, *American Journal of Agricultural Economics*, vol. 92(3), pages 836-848
- 2009 Alexandre Gohin, Fabienne Femenia, “Estimating Price Elasticities of Food Trade Functions : How Relevant is the CES-based Gravity Approach?” *Journal of Agricultural Economics*, vol. 60(2), pages 253-272
- Fabienne Femenia, Alexandre Gohin, “On the European Responsibility in the Agricultural Multilateral Trade Negotiations : Modelling the Impacts of the Common Agricultural Policy” *The World Economy*, vol. 32(10), pages 1434-1460

Book Chapter

- 2022 Bazoche, et al., ‘Les leviers politiques et organisationnels’, *In : Jacquet, et al., Zéro pesticide : un nouveau paradigme de recherche pour une agriculture durable. éditions Quae.*
- 2012 Fabienne Femenia, Alexandre Gohin, “Dynamic modelling of agricultural policies : the role of expectation schemes”, *In : Bertrand Munier, dir., Bertrand Munier, Global Uncertainty and the Volatility of Agricultural Commodities Prices (p. 13-44). Amsterdam, NLD : IOS Press.*

Other Publications

- 2016 Fabienne Femenia, Christophe Gouel, “Volatilité des cours des commodities agricoles et politiques de stabilisation”, *INRA Sciences Sociales, N° 1-2/2016*

Expertise reports

- 2023 “Protéger les cultures en augmentant la diversité végétale des espaces agricoles”, *Collective scientific expertise report* , INRAE, France
- 2017 “Feasibility study on modeling crop rotation effects”, *Expertise report for the European Union the Joint Research Center (JRC)*, Sevilla, Spain
- 2015 “Literature review on the estimations of food demand elasticities”, *Expertise report for the International Food Policy Research Institute (IFPRI)*, Washington DC, USA

Working papers

- 2022 Ibirénoye Honore Romaric Sodjahin, Fabienne Femenia, Obafémi Philippe Koutchade, Alain Carpentier, “On the economic value of the agronomic effects of crop diversification for farmers : estimation based on farm cost accounting data” *SMART-LERECO Working Paper WP22-02*
- 2021 Fabienne Femenia, Laure Latruffe, Jean-Paul Chavas, “Responsiveness of farm investment to price changes : Evidence from the French crop sector” *SMART-LERECO Working Paper WP21-02*
- 2020 Obafémi Philippe Koutchade, Alain Carpentier, Fabienne Femenia, “Crop choices in micro-econometric multi-crop models : modelling corners, kinks and jumps” *SMART-LERECO Working Paper WP20-09*
- 2019 Fabienne Femenia, “A Meta-Analysis of the Price and Income Elasticities of Food Demand” *SMART-LERECO Working Paper WP19-03*
- 2016 Fabienne Femenia, Elodie Letort, “How to achieve significant reduction in pesticide use ? An empirical evaluation of the impacts of pesticide taxation associated to a change in cropping practice” *SMART-LERECO Working Paper WP16-02*
- 2015 Obafémi Philippe Koutchade, Alain Carpentier, Fabienne Femenia, “Empirical modeling of production decisions of heterogeneous farmers with random parameter models” *SMART-LERECO Working Paper WP15-10*
- 2012 Fabienne Femenia, “Should private storage be subsidized to stabilize agricultural markets after price support schemes are removed ? A general equilibrium analysis applied to European reforms” *IFPRI Discussion Paper 01205*
- 2009 Fabienne Femenia, Alexandre Gohin, “Estimating censored and non homothetic demand systems : the generalized maximum entropy approach”, *SMART-LERECO Working Paper WP09-12*

Scientific Communications

- 2023 “Economic incentives to the adoption of low-pesticide cropping practices : an evaluation of pesticide taxation”, *Congress of the European Association of Agricultural Economists*, Rennes, France, 29 August-1 September
- 2022 “On the economic value of the agronomic effects of crop diversification for farmers : Estimation based on farm cost accounting data”, *Agricultural and Applied Economic Association*, Anaheim, USA, 31 July-2 August
- “Farmers’ heterogeneous responses to price variations : Identification of dairy farms flexibility based on a panel smooth transition regression approach”, *Agricultural and Applied Economic Association*, Anaheim, USA, July 31 - August 2

- 2021 “Variable Input Allocation Among Crops : A Random Parameter Approach With Stochastic Constraints Using SAEM Algorithm”, *Virtual Congress of the European Association of Agricultural Economists*, Prague, Czech Republic, 20 - 23 July
- 2018 “Estimating crop rotation effects with farm accountancy panel data”, *30th International conference of agricultural economists (ICAE)*, Vancouver, Canada, 28 July - 2 August
- 2017 “ Responsiveness of farm investment to price changes : An empirical study of the French crop sector”, *Congress of the European Association of Agricultural Economists*, Parma, Italy, 29 August-1 September
- “ Responsiveness of farm investment to price changes : An empirical study of the French crop sector”, *Journées de Microéconomie Appliquée*, Le Mans, 1-2 June
- 2016 “Hétérogénéité des producteurs agricoles et localisation des systèmes de culture”, *Journée du Département SAE2, INRA, “Territorialisation des systèmes de production”*, Paris, France, 16 December
- “Responsiveness of farm investment to price changes : An empirical study of the French crop sector”, *Journées de Recherche en Sciences Sociales*, Paris, France, 8-9 December
- 2015 “Accounting for Unobserved Heterogeneity in Micro-econometric Agricultural Production Models : a Random Parameter Approach”, *Agricultural and Applied Economic Association*, San Francisco, USA, 26-28 July
- 2014 “Economic incentives to the adoption of low input cropping systems : The case of multi-resistant wheat cultivars in France”, *Journées de Recherche en Sciences Sociales*, Grenoble, France, 11-12 December
- “Economic incentives to the adoption of low input cropping systems : The case of multi-resistant wheat cultivars in France”, *INRA, Département SAE2, Journées Jeunes Chercheurs*, Nancy, France, 24-26 September
- “Economic incentives to the adoption of low input cropping systems : The case of multi-resistant wheat cultivars in France”, *Congress of the European Association of Agricultural Economists*, Ljubljana, Solvenia, 26-29 August
- “Taking into account the evolution of world food demand in CGE simulations of policy reforms : the role of demand systems”, *Global Trade Analysis Project, Annual Conference*, Dakar, Senegal, 18-20 June
- 2012 “Should private storage be subsidized to stabilize agricultural markets after price support schemes are removed ? A general equilibrium analysis applied to European reforms.”, *Global Trade Analysis Project, Annual Conference*, Geneva, Switzerland, 27-29 June

- 2011 “To Subsidize or Not to Subsidize Private Storage? Evaluation of the Effects of Private Storage Subsidies as an Instrument to Stabilize Agricultural Markets After CAP Reforms”, *Congress of the European Association of Agricultural Economists*, Zurich, Switzerland, 30 August - 2 September.
- 2010 “To subsidize or not to subsidize private storage ? Evaluation of the effects of private storage subsidies as an instrument to stabilize agricultural markets after CAP reforms”, *Société Française d’Economie Rurale, Deuxièmes Journées de Recherches en Sciences Sociales*, Rennes, France, 9-10 December
- 2009 “Impacts of stockholdings behaviours on agricultural market volatility : a dynamic Computable General Equilibrium approach”, *International Agricultural Trade Research Consortium, Annual Meeting*, Fort Myers, USA, 13-15 December
- “Impacts of stockholdings behaviours on agricultural market volatility : a dynamic Computable General Equilibrium approach”, *European Association of Agricultural Economists, PhD Workshop*, Giessen, Germany, 10-11 September
- “Dynamic modelling of agricultural policies : the role of expectation schemes”, *International Association of Agricultural Economists, Triennial Conference*, Beijing, China, 16-22 August
- 2008 “Dynamic modelling of agricultural policies : the role of expectation schemes”, *Société Française d’Economie Rurale, Deuxièmes Journées de Recherches en Sciences Sociales*, Lille, France, 11-12 December
- “Faut-il une intervention publique pour stabiliser les marchés agricoles ? Revue des arguments”, *INRA, Département SAE2, Journées Jeunes Chercheurs*, Montpellier, France, 16-17 October
- “The decoupling of farm programs : Revisiting the wealth effect”, *Congres of the European Association of Agricultural Economists*, Ghent, Belgium, 26-29 August
- “Decoupling of direct agricultural income support : the wealth effect revisited”, *European Association of Agricultural Economists, Seminar*, Warsaw, Poland, 8-9 February
- 2007 “The Relative Importance of EU, US and Japan Agricultural Policies in World Trade Negotiations”, *European Trade Study Group, Annual Conference*, Athens, Greece, 13-15 Septembre
- “Estimating Censored and Non Homothetic Demand Systems : The Generalized Maximum Entropy”, *Global Trade Analysis Project, Annual Conference*, Purdue, USA, 7-9 June
- 2006 “Estimating Price Elasticities of Food Trade Functions : How Relevant is the CES-based Gravity Approach ?”, *International Agricultural Trade Research Consortium, Annual Meeting*, Saint Petersburg, USA, 3-5 December