

Curriculum Vitae

Name Surname **Maria Blanco**

Current Position **Associate Professor**

Affiliation Universidad Politécnica de Madrid

Office Address Department of Agricultural Economics, ETSIAAB, Avda. Puerta de Hierro 2, 28040 Madrid (Spain)

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Webpage [Personal Webpage](#) [ResearcherID](#) [Google Scholar](#) [ORCID number](#)

Nationality Spanish

Areas of interest

Foresight analysis of agricultural, trade and environmental policies.

Agricultural sustainability. Development of bioeconomic modelling tools for the integrated assessment of agricultural and environmental policies.

Water-energy-food-ecosystems nexus in a context of global change.

Circular bioeconomy.

Work experience

Current position **Associate Professor, since Dec 2001**
Department of Agricultural Economics, CEIGRAM, [Technical University of Madrid](#) (Spain).

Main responsibilities Teaching Master courses in Agroeconomic Modelling and undergraduate courses in Bioeconomics.
Coordination of the [Master in Agricultural, Food and Resource Economics](#) at the Technical University of Madrid.
Coordination of the innovation group [AgroEcoS](#) (Agroeconomis, Agrofood systems, Agroecosystems).

Current research work and responsibilities:

- Development of complex agroeconomic models for policy impact assessment.
- Director of Research in H2020 projects: [SUPREMA](#): SUpport for Policy RElevant Modelling of Agriculture (2018-2020), [SIM4NEXUS](#): Sustainable Integrated Management FOR the NEXUS of water-land-food-energy-climate for a resource-efficient Europe (2016-2020).
- Director of Research in Spanish projects: [SYNERCAP](#): Synergies between agricultural and environmental policies aiming at the sustainability of Mediterranean agrosystems (2016-2019).

Previous academic experience **Senior Researcher, Oct 2008 – Sep 2010**
[European Commission Joint Research Centre](#), Seville (Spain).

Assistant Professor, Feb 1995 – Dec 2001
Department of Agricultural Economics, [Technical University of Madrid](#) (Spain).

Visiting Researcher, Feb 2000 – Jan 2001
International Centre for Advanced Mediterranean Agronomic Studies, [Mediterranean Agronomic Institute of Montpellier](#) (France).

Education and training

1999 PhD in Agricultural Economics. Universidad Politécnica de Madrid (Spain).

1995 M.Sc. in Agricultural Economics and Policy. International Centre for Advanced Mediterranean Agronomic Studies, Mediterranean Agronomic Institute of Montpellier (France).

1992 First Degree in Agricultural Engineering. Universidad Politécnica de Madrid (Spain).

Personal skills and competences

- Language(s) Spanish (mother tongue), English (C1), French (C1).
- Social skills and competences
- High level skills in drafting, presentation and communication of complex results.
 - Working knowledge of English and French.
 - Communication skills: More than 20 years of teaching/research experience at the University. Since 1996, invited lecturer in several international post-graduate programs, both in French and in English.
 - Intercultural skills: Highly experienced at working in intercultural environments. Have worked for several years in international organizations.
 - Leadership and coordination skills: Director of research in several national and international research projects. Coordination of academic programmes at the University. Extensive experience in organisation of training activities in agro-economic modelling.
- Computer skills and competences
- Strong modelling skills in GAMS (high-level modelling system for mathematical programming).
 - Expertise in data management and econometric analysis (R software).
 - Competent with most Microsoft Office programmes.

Membership

- Modelling consortia Member of the [CAPRI](#) Consortium since 2005. CAPRI is a partial equilibrium model for the agricultural sector developed for policy impact assessment of the Common Agricultural Policy and trade policies from global to regional scale with a focus on the EU.
- Research groups Member of the Research Centre [CEIGRAM](#), UPM.
Member of the Research Group [ECOAGRENA](#), UPM.
Member of the Innovation Center [itdUPM](#).
Coordinator of the Innovation Group [AgroEcos](#) (Agroeconomics, Agrofood chains, Agroecosystems).
- Professional societies International Association of Agricultural Economists (IAAE)
European Association of Agricultural Economists (EAAE)
Asociación Española de Economía Agraria (AEEA)

Recent Publications

Articles and books

- Martínez, P., Blanco, M. (2019). [Sensitivity of Agricultural Development to Water-Related Drivers: The Case of Andalusia \(Spain\)](#). *Water*, 11(9), 1854, doi: <https://doi.org/10.3390/w11091854>
- Castaño J., Blanco M., Martínez P. (2019). [Reviewing Counterfactual Analyses to Assess Impacts of EU Rural Development Programmes: What Lessons Can Be Learned from the 2007–2013 Ex-Post Evaluations?](#) *Sustainability*, 11(4), 1105, doi: [10.3390/su11041105](https://doi.org/10.3390/su11041105)
- Fernández F.J., Blanco M., Ponce R.D., Vásquez-Lavín F., Roco L. (2019). [Implications of climate change for semi-arid dualistic agriculture: a case study in Central Chile](#). *Regional Environmental Change*, 19(1): 89-100, doi: [10.1007/s10113-018-1380-0](https://doi.org/10.1007/s10113-018-1380-0)
- Blanco M., Witzke P., Barreiro-Hurle J., Martínez P., Salputra G. and Hristov J. (2018). [CAPRI Water 2.0: an upgraded and updated CAPRI water module](#). European Union, EUR 29498 EN. Luxembourg: Publications Office of the European Union, doi: <https://doi.org/10.2760/83691>
- Martínez P., Blanco M., Castro-Campos B. (2018). [The Water–Energy–Food Nexus: A Fuzzy-Cognitive Mapping Approach to Support Nexus-Compliant Policies in Andalusia \(Spain\)](#). *Water* 2018, 10 (5), 664. doi: [10.3390/w10050664](https://doi.org/10.3390/w10050664)
- Blanco M. (2018). [The impact of the Common Agricultural Policy on developing countries](#). Brussels, European Parliament, Directorate-General for External Policies, doi: [10.2861/953397](https://doi.org/10.2861/953397)
- Blanco M, Ramos F, Van Doorslaer B, Martínez P, Fumagalli D, Ceglar A, Fernández FJ (2017). [Climate change impacts on EU agriculture: A regionalized perspective taking into account market-driven adjustments](#). *Agricultural Systems*, 156: 52-66, doi: [10.1016/j.agsy.2017.05.013](https://doi.org/10.1016/j.agsy.2017.05.013)

- Vega-Quezada C., Blanco M., Romero H. (2017). [Synergies between agriculture and bioenergy in Latin American countries: A circular economy strategy for bioenergy production in Ecuador](#). *New Biotechnology*, 39(A): 81-89. doi: 10.1016/j.nbt.2016.06.730
- Martínez P, Blanco M, Van Doorslaer B, Ramos F, Ceglar A (2017). [What role will climate change play in EU agricultural markets? An integrated assessment taking into account carbon fertilization effects](#). *Spanish Journal of Agricultural Research*, 15(3), e0115. doi: 10.5424/sjar/2017153-9899
- Martínez P, Castaño J, Blanco M (2017). Simulador PAC: lecciones del análisis del pago verde. *Revista de Estudios Agrosociales y Pesqueros*, 248: 15-37.
- Vega-Quezada C., Blanco M. (2017). Photobioreactors within the framework of circular economy and poverty eradication: Bioenergy production in the Ecuador–Peru Border Integration zone. In Tsang T.F. (Ed.): *Photobioreactors: Advancements, Applications and Research*. NY, USA: Nova Science Publishers.
- Vega-Quezada C, Blanco M, Romero H (2017). [Production of Bioenergy in the Framework of Circular Economy: A Sustainable Circular System in Ecuador](#). In Singh and Chaudhary (Eds.): *Advances in Biofeedstocks and Biofuels, Volume One: Biofeedstocks and Their Processing*, p. 1-32. Scrivener Publishing/Wiley. doi: 10.1002/9781119117322.ch1
- Vega-Quezada CA, Blanco M, Romero H (2016). [The circular agriculture applied in neighboring countries: the case of biogas on the border between Ecuador and Perú](#). *New Biotechnology*, 33, 66-67. doi: 10.1016/j.nbt.2016.06.953
- Blanco M (2016). Policy Impact Assessment. In Shrestha et al. (Eds.): [Farm-level Modelling: Techniques, Applications and Policy](#), pp. 1-13. UK: CAB International. ISBN: 9781780644288.
- Fernández FJ, Ponce RD, Blanco M, Rivera D, Vásquez F (2016). [Water Variability and the Economic Impacts on Small-Scale Farmers. A Farm Risk-Based Integrated Modelling Approach](#). *Water Resources Management*, 30: 1357. doi: 10.1007/s11269-016-1227-8
- Araujo-Enciso S.R., Blanco M., Artavia M., Ramos F., M'Barek R., Van Doorslaer B., Stanca L., Donmez A. (2016). Medium-term Drivers of Food Markets Variability and Uncertainty. In Garrido et al. (Eds.), ["Agricultural Markets Instability: Revisiting the Recent Food Crises"](#), pp. 59-73. London and New York: Routledge.
- Blanco M., Witzke HP, Perez-Domínguez I, Salputra G, Martínez P (2015). [Extension of the CAPRI model with an irrigation sub-module](#). Luxembourg: Publications Office of the European Union, EUR 27737 EN, doi: 10.2791/319578
- Ponce R, Blanco M, Giupponi C (2015). [Welfare Effects of Water Variability in Agriculture. Insights from a Multimarket Model](#). *Water*, 7(6), 2908-2923. doi: 10.3390/w7062908
- Fernández FJ, Blanco M (2015). [Modelling the Economic Impacts of Climate Change on Global and European Agriculture. Review of Economic Structural Approaches](#). *Economics*, 9(10), 1-53, doi: 10.5018/economics-ejournal.ja.2015-10
- Ponce R, Blanco M, Giupponi C (2014). [The economic impacts of climate change on the Chilean agricultural sector. A non-linear agricultural supply model](#). *Chilean journal of agricultural research*, 74 (4), 404-412, doi: 10.4067/S0718-58392014000400005
- Blanco M, Viladrich M (2014). [La creación de un centro de intercambio de derechos de agua en la Cuenca del Segre y la contribución de los flujos de retorno](#). *ITEA - Información Técnica Económica Agraria*, 110 (4).
- Louhichi K, Gomez y Paloma S, Belhouchette H, Allen T, Fabre J, Blanco M, Chenoune R, Acs S, Flichman G (2013). [Modelling Agri-Food Policy Impact at Farm-household Level in Developing Countries \(FSSIM-Dev\): Application to Sierra Leone](#). JRC Scientific and Policy Report EUR 25962 EN. Luxembourg: Publications Office of the European Union, 2013, doi: 10.2791/14527
- Blanco M, Adenäuer M, Shrestha S, Becker A (2013). [Methodology to assess EU Biofuel Policies: The CAPRI Approach](#). JRC Scientific and Policy Report EUR 25837 EN. Luxembourg: Publications Office of the European Union, 2013, doi: 10.2791/82235
- Blanco M, Van Doorslaer B, Britz W, Witzke HP (2012). [Exploring the feasibility of integrating water issues into the CAPRI model](#). JRC Scientific and Policy Report EUR 25649 EN. Luxembourg: Publications Office of the European Union, 2012, doi: 10.2791/34397

- Belhouchette H, Blanco M, Wery J, Flichman G (2012). [Sustainability of irrigated farming systems in a Tunisian region: A recursive stochastic programming analysis](#). *Computers and Electronics in Agriculture*, 86, 100-110, doi: 10.1016/j.compag.2012.02.016
- Blanco M. (2011). [Supply of and access to key nutrients NPK for fertilizers for feeding the world in 2050](#). Project Report. European Commission Joint Research Centre, Brussels, 2011.
- Blanco M, García-Germán S, Bardají I (2011). [El modelo de ayudas directas en la PAC post-2013: Análisis de impactos de escenarios potenciales](#). *Economía Agraria y Recursos Naturales*, 11 (2), 83-108.
- Blanco M, Flichman G, Belhouchette H (2011). [Dynamic Optimisation Problems: Different Resolution Methods Regarding Agriculture and Natural Resource Economics](#). In: Flichman G (Ed.), [Bio-Economic Models applied to Agricultural Systems](#), pp. 29-57, doi:10.1007/978-94-007-1902-6. Springer, Dordrecht, Heidelberg, London, New York.
- Louhichi K, Kanellopoulos A, Janssen S, Flichman G, Blanco M, Hengsdijk H, Heckeleei T, Berentsen P, Lansink AO, Van Ittersum M (2010). [FSSIM, a bio-economic farm model for simulating the response of EU farming systems to agricultural and environmental policies](#). *Agricultural Systems* 103: 585-597. doi: 10.1016/j.agsy.2010.06.006
- Janssen S, Louhichi K, Kanellopoulos A, Zander P, Flichman G, Hengsdijk H, Meuter E, Andersen E, Belhouchette H, Blanco M, Borkowski N, Heckeleei T, Hecker M, Li H, Oude Lansink A, Stokstad G, Thorne P, van Keulen H, van Ittersum MK (2010). [A Generic Bio-Economic Farm Model for Environmental and Economic Assessment of Agricultural Systems](#). *Environmental Management*, 46: 862–877, doi:10.1007/s00267-010-9588-x.
- Blanco M, Burrell A, Gay SH, Henseler M, Kavallari A, M'Barek R, Pérez Domínguez I, Tonini A (2010). [Impacts of the EU biofuel target on agricultural markets and land use: a comparative modelling assessment](#). European Commission Joint Research Centre, Reference Report EUR 24449. Luxembourg: Publications Office of the European Union, doi:10.2791/45105
- Blanco M, Navarro Valbuena D, Viladrich M (2010). [¿Pueden los instrumentos económicos contribuir a la sostenibilidad del regadío en las regiones mediterráneas?](#) *Anales de Economía Aplicada* 2010, ISBN 978-84-92954-15-5.
- Louhichi K, Janssen S, Kanellopoulos A, Li H, Borkowski N, Flichman G, Hengsdijk H, Zander P, Blanco M, Stokstad G, Athanasiadis I, Rizzoli AE, Huber D, Heckeleei T, van Ittersum MK (2010). [A generic Farming System Simulator \(FSSIM\)](#). In: Brouwer FM, van Ittersum MK (Eds.), [Environmental and Agricultural Modelling: Integrated Approaches for Policy Impact Assessment](#), doi:10.1007/978-90-481-3619-3_5. Springer, Dordrecht, The Netherlands.

Conference papers

- Nogales R., Castro-Campos B., Blanco M. (2019). El potencial de la energía solar en el nexo regadío-energía en la cuenca del Guadalquivir: un enfoque de dinámica de sistemas. XII Congreso de Economía Agraria, "La Sostenibilidad Agro-territorial desde la Europa Atlántica". Lugo, 4-6 septiembre 2019.
- Blanco M., Martínez P., Witzke P., Hristov J., Salputra G., Barreiro-Hurle J. (2019). Impacts of climate change in European agriculture: the interplay between irrigation and agrifood markets. 11th World Congress on Water Resources and Environment (EWRA 2019), "Managing Water Resources for a Sustainable Future", Madrid, Spain, 25-29 June 2019.
- Hristov, J., Salputra, G., Barreiro Hurle, J., Blanco, M., & Witzke, P. (2019). Addressing water scarcity in agriculture with water reuse as alternative supply option. In 172nd EAAE Seminar, May 28-29, 2019, Brussels, Belgium (No. 289743). European Association of Agricultural Economists.
- Castro-Campos B., Martínez P., Blanco M. (2018). Understanding policy (in)coherence in the water-energy-food-environment nexus: The case of Andalusia (Spain). GEWISOLA 2018, Kiel, 12-14 September 2018.
- Trabucco A., Sušnik J., Vamvakieridou-Lyroudia L., Evans B., Masia S., Blanco M.,..., Mereu, S. (2018). Water-Food-Energy Nexus under Climate Change in Sardinia. EWaS International Conference on "Insights on the Water-Energy-Food Nexus". Proceedings 2018, 2, 609. doi: <https://doi.org/10.3390/proceedings2110609>
- Castaña J., Blanco M., Martínez P. (2018). Evaluating RDPs: To what extent has counterfactual analysis contributed to improving the evaluation of ex-post impacts? Paper to the 162nd EAAE Seminar "The evaluation of new CAP instruments: Lessons learned and the road ahead". Budapest (Hungary), 26-27 April, 2018.

- Satama-Bermeo M, Blanco M, Vega-Quezada C (2016). Evaluación del impacto de las ferias agroecológicas en el Ecuador. XII Congreso de la Sociedad Española de Agricultura Ecológica/Agroecología. Lugo, España, 21-23 Septiembre 2016.
- Vega-Quezada C, Blanco M, Romero H (2016). The circular agriculture applied in neighbouring countries: the case of biogas on the border between Ecuador and Perú. 17th European Congress on Biotechnology. Krakov, Polonia, July 3-6, 2016.
- Bubbico A., Martínez P., Blanco M., Breen J. (2015). Impact of CAP green payment on different farming systems: the case of Ireland and Spain. 148th EAAE Seminar "Does Europe need a Food Policy?", Brussels, Belgium, November 30 – December 1, 2015.
- Martínez P, Blanco M (2015). Impact of CAP green payment on Spanish agriculture. X Congreso Nacional de Economía Agraria, Córdoba, Spain, September 9-11, 2015.
- Martínez P, Blanco M, Van Doorslaer B, Ramos F, Stanca L (2015). [What role does climate change play in agricultural market uncertainty? An integrated assessment taking into account market-driven adjustments](#). 29th International Conference of Agricultural Economists "Agriculture in an Interconnected World", Milan, Italy, August 8-14, 2015.
- Vega CA, Blanco M, Romero H (2014). Synergies between Agriculture and Bioenergy in Latin American Countries: The Potential Bio-economic Biodiesel in Ecuador. 16th International Biotechnology Symposium and Exhibition - IBS 2014 "Biotechnology for the Development of a Green Economy". Fortaleza, Brazil, September 14-19 2014.
- Blanco M, Ramos F, Van Doorslaer B (2014). [Economic impacts of climate change on agrifood markets: A bio-economic approach with a focus on the EU](#). EAAE 2014 Congress "Agri-Food and Rural Innovations for Healthier Societies", Ljubljana, Eslovenia, August 26-29, 2014.
- Ponce R, Blanco M, Giupponi C (2014). The Economic Impacts Of Climate Change On The Chilean Agricultural Sector. EAAE 2014 Congress "Agri-Food and Rural Innovations for Healthier Societies", Ljubljana, Eslovenia, August 26-29, 2014.
- Ponce R, Blanco M, Giupponi C (2014). Climate Change, Water Scarcity in Agriculture and The Country-Level Economic Impacts. A Multimarket Analysis. 5th World Congress of Environmental and Resource Economists (WCERE 2014), Istanbul, Turkey, June 28-July 2, 2014.
- Blanco M, Viladrich M (2013). Estimación de las ganancias mínimas que debe garantizar la creación de un centro de intercambio de derechos de agua en la Cuenca del Segre. IX Congreso de Economía Agraria, Castelldefels (Spain), September 3-5, 2013.
- Blanco M, Britz W, Witzke HP, Van Doorslaer B (2013). Joint assessment of water and agricultural policies: a Pan-European multidimensional modelling approach. 133 EAAE Seminar on "Developing Integrated and Reliable Modeling Tools for Agricultural and Environmental Policy Analysis", Chania (Greece), June 15-16, 2013.
- Fernandez FJ, Blanco M (2013). Effectiveness of EU sustainability criteria on palm oil-based biodiesel: Literature review and quantitative analysis. 133 EAAE Seminar on "Developing Integrated and Reliable Modeling Tools for Agricultural and Environmental Policy Analysis", Chania (Greece), June 15-16, 2013.
- Blanco M, Van Doorslaer B, Britz W (2012). [Assessing agriculture-water relationships: a Pan-European multidimensional modelling approach](#). 126th EAAE Seminar, "New challenges for EU agricultural sector and rural areas. Which role for public policy?" Capri (Italy), June 27-29, 2012.
- Blanco M, Shrestha S, Adenauer M, Becker A (2012). Implications of biofuel support policies in Europe - a quantitative analysis in an open economy. 16th ICABR Conference – 128th EAAE Seminar, "The political economy of the bioeconomy: Biotechnology and biofuel", Ravello, Italy, June 24-27, 2012.
- Blanco M, Viladrich M (2012). Aspectos económicos de la creación de un centro de intercambio en la Cuenca del Segre. V AERNA Conference, Faro (Portugal), May 31-June 2, 2012.
- Becker A, Adenauer M, Blanco M (2010). [Impacts of European biofuel policies on agricultural markets and environment under consideration of 2nd generation technologies and international trade](#). International Agricultural Trade Research Consortium (IATRC) Conference "Climate Change in World Agriculture: Mitigation, Adaptation, Trade and Food Security", Stuttgart-Hohenheim, Germany, June 27-29, 2010.
- Blanco M, Navarro D, Viladrich M (2010). ¿Pueden los instrumentos económicos contribuir a la sostenibilidad del regadío en las regiones mediterráneas? XXIV ASEPELT, Alicante, June 16-19, 2010.

Invited Speaker

- Blanco M. (2018). Sostenibilidad en la producción agraria. Indicadores de sostenibilidad. XVII Encuentro del Sistema de los INIA de Iberoamérica. Guayaquil, Ecuador, 1-3 octubre de 2018.
- Blanco M. (2018). The impact of the CAP 2014-2020 on developing countries. Joint DEVE-AGRI hearing on "The Impact of the Common Agricultural Policy on developing countries". European Parliament, Brussels, 27 February 2018.
- Blanco M. (2018). Herramientas para la lucha contra el cambio climático en el sector agrario: lo que nos indican los "modelos". Ponencia invitada en la Jornada sobre cambio climático y sistema agroalimentario nacional "Hacer más, con menos y mejor". Fundación Foro Agrario, Madrid (Spain), Febrero 2018.
- Martínez P., Blanco M. (2017). The Potential Role of Agricultural Trade in Mitigating the Impacts of Climate Change: A bio-economic modelling approach. *International Technical Conference on Climate Change, Agricultural Trade and Food Security*. FAO, Rome, November 2017.
- Blanco M. (2017). La bioeconomía como motor de cambio. Ponencia invitada en la Jornada Técnica Agroalimentaria "Bioeconomía y Agricultura". ETSIAAB-Cátedra Cajamar, Madrid (Spain), March 2017.
- Blanco M. (2017). La economía circular en el sector agrario: implicaciones económicas. Invited paper to the "X Jornada Fertilización para una agricultura sostenible: Economía circular e innovación". Cátedra Fertiberia de Estudios Agroambientales, Madrid (Spain), March 2017.
- Blanco M. (2015). Utilizando Big Data para Evaluar Efectos Agroambientales y Contribuir al Diseño de Políticas más Sostenibles. Invited paper to the XXV Foro INIA "Big Data y sus aplicaciones en el ámbito agroalimentario". Madrid (Spain), December 2015.
- Blanco M. (2015). Bio-economic models: on-going developments at farm and regional level. Invited paper to the FSD Course 2015 "Analysis and Design of Sustainable Agricultural Systems: Concepts, Methods and Applications". Montpellier (France), September 2015.
- Blanco M. (2014). DAHBSIM – Dynamic Agricultural Household Bioeconomic Simulation Model. Invited paper to the Workshop "Household Farm-level Bio-Economic Modeling", Washington DC (USA), December 2014.
- Blanco M. (2014). Bio-economic models: concept and examples of application. Invited paper to the Workshop "Sustainable intensification and resilience of Agricultural Systems: An Integrated Assessment and Modelling of Agricultural Systems (IAAS) approach", Hammamet (Tunisia), November 2014.
- Blanco M. (2013). The food versus fuel debate. Invited paper to the Workshop "Biofuel Policy for a Low Carbon Future". Basque Centre for Climate Change (BC3), Bilbao (Spain), September 2013.
- Blanco M. (2013). EU Biofuel Support Policies: Implications for Agriculture and the Environment. Invited paper, Biofuels Seminar, Università Ca'Foscari Venezia, Venezia (Italy), March 2013.
- Blanco M. Viladrich M. (2013). Estimación de las ganancias que debe garantizar la creación de un centro de intercambio de derechos en la Cuenca del Segre. Invited paper to the seminar "Instrumentos económicos para la gestión del agua en España", Fundación IMDEA Agua, Alcalá de Henares (Spain), March 2013.
- Blanco M. (2011). Future supply and access to NPK. Invited paper to the Workshop "NPK - will there be enough plant nutrients to feed a world of 9 billion in the year 2050?". European Commission's Joint Research Centre, Brussels, 5-6 December 2011.

Economic modelling trainer

- The basic structure of CAPRI. CAPRI Training Session, several years (Seville 2019, Uppsala 2018, Ispra 2017, Dublin 2016, Madrid 2015, Braunschweig 2014).
- GAMS-GLOBIOM Training. Postgraduate Training Course. International Institute for Applied Systems Analysis (IIASA), Laxenburg, May 2018.
- GAMS-CAPRI Training. Postgraduate Training Course. European Commission Joint Research Centre, Seville, April 2018.
- Facilitating the transition to the GAMS software in AGLINK-COSIMO. Organisation for Economic Co-operation and Development (OECD), Paris, November 2017.
- GAMS applied to Agro-economic Modelling. European Commission Joint Research Centre, Sevilla, several years (June 2017, April 2011, May 2010, February 2010, May 2005).

GAMS-AGLINK-COSIMO Course. Organisation for Economic Co-operation and Development (OECD) and European Commission, Seville, June 2017.

Agroeconomic Modelling with GAMS. Postgraduate Training Course, Universidad Politécnica de Madrid, several years (June 2016, June 2015, June 2014, November 2013, July 2008, July 2005).

Farm Level Modelling with GAMS. SRUC (Scottish Agricultural College), Edimburgo, Reino Unido, February 2014.

Training Workshop "Understanding Agro-economic Models and their Role in Policy Analysis". European Commission, DG Agriculture and Rural Development, Brussels. Sessions in March, September and October 2009.

An introduction to stochastic programming using GAMS. Operational Programme for Education and Initial Vocational Training (O.P. "Education"). Department of Agricultural Economics & Rural Development, Agricultural University of Athens, Greece, 17-18 May 2007.

Irrigation water management: economic and environmental aspects. Master of Science "Land and Water Resources Management: Irrigated Agriculture". International Centre for Advanced Mediterranean Agronomic Studies, Mediterranean Agronomic Institute of Bari, Italy, several years (April 2008, April and May 2007, April and May 2006).

Programmation mathématique appliquée à l'exploitation agricole. Master of Science "Politiques et Choix Publics en Agriculture et Alimentation". International Centre for Advanced Mediterranean Agronomic Studies, Mediterranean Agronomic Institute of Montpellier, France, several years (January 2005, January 2006).

Student Supervision

Martínez Muñoz, Pilar. PhD Dissertation: Sustainable agriculture and resource use under climate change: a multi-scale and cross-sectoral approach with a focus on Andalusia (Spain). Universidad Politécnica de Madrid, 2019, doi: <https://doi.org/10.20868/UPM.thesis.53164>

Nogales Romero, Rogelio. Nexo regadío-energía en Andalucía: Análisis del potencial de la energía solar mediante dinámica de sistemas. Universidad Politécnica de Madrid, 2019.

Villacorta Ranera, Cintya. Estudio y análisis del impacto de la introducción de quinoa en el sector agrario de Guadalajara. Universidad Politécnica de Madrid, 2019.

Vega Quezada, Cristhian. PhD Dissertation: "Sinergias entre agricultura y bioenergía como estrategia de desarrollo desde los bordes en los países de América Latina: caso de la frontera entre Ecuador y Perú". Department of Agricultural Economics, Universidad Politécnica de Madrid, 2018, doi: <https://doi.org/10.20868/UPM.thesis.53164>

Ruiz Oliva, Paula. Diseño de una herramienta de evaluación de impactos socioeconómicos de la política de desarrollo rural en Andalucía. Universidad Politécnica de Madrid, 2018.

Ramos Nebot, Inés. MsC Dissertation: Reutilización del agua en las cuencas mediterráneas andaluzas: hacia una economía circular. Universidad Politécnica de Madrid, 2018.

Díez García, Roberto. MsC Dissertation: Caracterización socio económica de comunidades de pescadores tradicionales en Brasil: Laguna Mundaú. Modelos de negocios inclusivos de economía circular. Universidad Politécnica de Madrid, 2018.

García García-Galán, José María. MsC Dissertation: "Certificación agroecológica: claves para la definición y aplicación de un Sistema Participativo de Garantía (SPG) en el área periférica de Rabat, Marruecos". Universidad Politécnica de Madrid, 2018.

Fernández Jorquera, Francisco. PhD Dissertation: Economic effects of climate change on agriculture: multi-scale assessment through regional mathematical programming models. Department of Agricultural Economics, Universidad Politécnica de Madrid, 2017, doi: <https://doi.org/10.20868/UPM.thesis.47723>

Satama Bermeo, Maritza. MsC Dissertation: "Impacto de las ferias agroecológicas en la reducción de la pobreza en Ecuador". Department of Agricultural Economics, Universidad Politécnica de Madrid, 2016.

Ponce Oliva, Roberto Daniel. PhD Dissertation: "Economy-wide Impacts of Climate Change on Agriculture. Coupling Modeling Approach". Università Ca'Foscari, Venezia, 2013.

Vega Quezada, Cristhian. MsC Dissertation: "Potencial de las sinergias agrícolas-bioenergéticas en los países en desarrollo: Caso Ecuador". Department of Agricultural Economics, Universidad Politécnica de Madrid, 2013.

Fernández Jorquera, Francisco. MsC Dissertation: "Potencial de Acuerdo de Libre Comercio entre UE–Indonesia y Malasia: Evaluación de impactos al sector agrícola a través del modelo de equilibrio parcial CAPRI". Department of Agricultural Economics, Universidad Politécnica de Madrid, 2012.

García-Germán, Sol. MsC Dissertation: "El modelo de ayudas directas en la PAC post-2013: análisis de impactos de escenarios potenciales". Department of Agricultural Economics, Universidad Politécnica de Madrid, 2011.

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