

CURRICULUM VITAE

Personal Information

Surname(s) / Name(s)

Fernández Jorquera Francisco José

Affiliation

School of Agronomy, Faculty of Sciences, Universidad Mayor

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Web pages

[Webpage personal](#)

[Google Scholar](#)

[ResearchGate](#)

[ResearchID](#)

[Linkedin](#)

Areas of interest

Quantitative Analysis of Agricultural Policies and climate change's economic effects on agriculture.
Economics of impacts and adaptation to climate change and methodological issues involved with agricultural economic modelling.
Analysis of agriculture-poverty-climate nexus in a context of climate change
Agricultural and Natural Resource economics

Work Experience

Academy / Teaching

Dates

April 2018 – Present

Position held

Assistant Professor

Main Activities and Responsibilities

Teaching undergraduate courses in Agricultural Economics and Statistical Methods at the Department of Agronomy at Universidad Mayor, Chile.
Virtual coordinator. Responsible for advising students and teachers in the correct use of the Blackboard platform

Current Research work and responsibilities:

- Development of agroeconomic models, farm typologies, market segmentation, for climate change impact and policy impact assessment.

Dates

April 2017 - 2019

Position held

Visiting professor

Main Activities and Responsibilities

Teaching Master courses in Environmental Economics and Sustainable Development for the Magíster en Gestión Integrada: Medio Ambiente, Riesgos Laborales y Responsabilidad Social Empresarial

Institution

Universidad de Concepción

Dates

August 2017 – August 2018

Position held

Visiting professor

Main Activities and Responsibilities

Teaching courses in Environmental Economics for the Conservación y Gestión de la Biodiversidad Doctorate program

Institution

Universidad Santo Tomás

Dates

June 2017 – July 2017

Position held

Visiting professor

Main Activities and Responsibilities

Teaching Master courses in Environmental Economics and Sustainable Development for the Magíster en Gestión de la Sustentabilidad Integrada.

Institution

Universidad del Desarrollo

Academy / Research

Dates

June 2019 – Present

Position held

Researcher

Research Line

Ecosystem services and human behavior.

Project

[CAPES](#) – Center of Applied Ecology and Sustainability

Institution

Pontificia Universidad Católica de Chile

Dates	March 2019 – Present
Position held	Post-doctorate researcher
Research Line	Human Dimension and Socio-ecological Systems
Project	MUSELS – Center for the study of Multiple Drivers On Marine Socio-Ecological Systems
Institution	Universidad de Concepción - EULA
Dates	January 2016 – January 2017
Position held	Research associate
Main Activities and Responsibilities	Assessment of potential High Production Values with the aim to capture the value that the economic activity brings to society. Project: “Analysis of determinants of Hydrological power in the basin of the rivers Palena, Cisnes, Baker and Pascua, considering the socio-ecological dynamics”
Project Counterpart	Ministry of Energy, Chile
Sector	Higher Education and Research – Universidad de Concepción
Dates	November 2015 – December 2016
Position held	Research associate
Main Activities and Responsibilities	Development and application of mathematical programming models to assess the economic impacts of pollution control policies for the basin of Villarica lake. Project: “Economic Instruments for pollution control in the basin of Villarica Lake”.
Project Counterpart	Ministry of Environment, Chile. - Universidad del Desarrollo
Sector	Higher Education and Research
Dates	October 2014 – January 2016
Position held	Doctorate Researcher
Main Activities and Responsibilities	Development and application of optimization models to assess the economic impacts of climate change at the basin level. Project: “Welfare and Economic Evaluation of Climatic Change Impacts on Water Resources at River Basin Scale” (EEC2 Water project)
Project Counterpart	International Development Research Centre (IDRC) – Universidad del Desarrollo
Sector	Higher Education and Research
Dates	August 2012 – August 2014
Position held	Researcher
Main Activities and Responsibilities	<p>Integral Analysis of Agricultural and Environmental Policies. Agriculture and Climate Change Research. Development and application of global agro-economical models. Sustainable Agriculture. Research work and responsibilities:</p> <ul style="list-style-type: none"> - Research in EU FP7 project: ULYSSES: “Understanding and coping with food markets voLatilitY towards more Stable World and EU food SystEmS”. - Review of the State of knowledge on Foresight agricultural analysis. Funded by Ministerio de Medio Ambiente y Medio Rural y Marino (Spain).
Name and address of employer	Universidad Politécnica de Madrid - Ramiro de Maeztu 7 - 28040 Madrid
Sector	Higher Education and Research – Technical University of Madrid
Consulting	
Dates	June 2020 – January 2021
Position Held	External Consulting Economic Commission for Latin America and the Caribbean (ECLAC)
Main Activities and Responsibilities	Estimate the costs of inaction against climate change in Chile in the scenarios without climate change and RCP8.5, in the Agricultural sector.
Project Counterpart	Economic Commission for Latin America and the Caribbean (ECLAC)

Dates	February 2018 – April 2018
Position held	External Consulting Inter-American Development Bank (IDB)
Main Activities and Responsibilities	Support the strengthening of the methodological framework for the project "Strategic advice for the formulation of a National Financing Strategy for the implementation of NDC in Chile
Project Counterpart	Ministry of Finance – Chile; Inter-American Development Bank

Dates	May 2017- April 2018
Position held	Green Climate Fund Consultant
Main Activities and Responsibilities	Adviser of the Green Climate Fund to enhance country ownership and access to the Fund.
Project Counterpart	Ministry of Finance – Green Climate Fund

Dates	April 2016 – December 2016
Position held	Research Associate
Main Activities and Responsibilities	Valuing Hydrological Environmental Services provided by the Nonguén National Reserve, as a consequence of protection management developed by the National Forest Commission, CONAF, Chile
Project Counterpart	National Forest Commission, CONAF

Dates	December 2009 – August 2011
Position held	Consultant
Main Activities and Responsibilities	Agronomist part of the team for the investigation to state alternatives to minimize costs in managements of solid-waste in the city. Specialized in programs of environmental education like composting and vermicomposting
Institution	Francisco Adasme Consulting Group – Talca (Chile)

Others

Dates	February 2009 – December 2009
Position held	Professor
Main Activities and Responsibilities	Teacher of different courses related to the agriculture like Plant Science, Earth science, Horticulture, Natural Resources and others. Besides teacher of chemistry for students of 1° y 2° grade of high school.
Name and address of employer	Don Gregorio Agricultural High School – Chimbarongo (Chile)

Dates	March 2008 - February 2009
Position held	Agronomist
Main Activities and Responsibilities	Part of working team focused on to visualized opportunities to rural development in poor areas of Hualañé. The team belonged to a foundation oriented to help poor people to improve their level of life which is a non-governmental organization well known in Chile.
Name and address of employer	Fundación para la Superación de la Pobreza (Programa Servicio País) – Santiago (Chile)

Education and training

Dates	July 2017
Title of qualification awarded	Ph.D. (cum laude) Agriculture and Environmental Economics.
Principal subjects/occupational skills covered	Climate change and the economic impacts on agriculture. Thesis title: "Economic effects of climate change on agriculture: multi-scale assessment through regional mathematical programming models".
Univesity	Technical University of Madrid

Dates	June 2012
Title of qualification awarded	M. Sc. in Agricultural Economics

Principal subjects/occupational skills covered	Agricultural Economics and Policy. Development Economics. Environmental and Natural Resources Management. Quantitative Methods in Economics. Thesis title: "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".
Univesity	Technical University of Madrid
Dates	September 2010
Title of qualification awarded	Diploma in irrigation management and fertility of soils
Principal subjects/occupational skills covered	Applied Hydraulics in Technical Irrigation. Soil, Water and Plant Relationships, programming and irrigation control. Methods of pressurized irrigation. Irrigation Policies. Precision irrigation
Univesity	Universidad de Talca - Chile
Dates	April 2007
Title of qualification awarded	Agronomist
Principal subjects/occupational skills covered	Six-year Degree: technical and socioeconomic subjects in the area of agriculture. Thesis title: "Economic exploration of the date palm, Phoenix dactylifera, and evaluation of localities in Tarapaca's region for this crop."
Univesity	Pontificia Universidad Católica de Valparaíso – Chile

Personal skills and competences

Mother tongue(s)

Spanish

Other language(s)

Self-assessment

European level (*)

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Proficient user	B2	Proficient user	B1	Proficient user	B1	Proficient user	B2	Proficient user

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences

- Team work: Member of several research teams in Europe and Chile. Further, I have worked in several teams from consulting groups, technical and cultural teams. I participated in a working team oriented to help poor people in rural areas of Chile to improve their quality of life.

Organisational skills and competences

- Teaching management: Experience in organisation of training activities in farm models with games and the basics of R.
- Coordinator of field trips teams taking samples and conducting waste analysis

Computer skills and competences

- Competent with most Microsoft Office
- Expertise in data wrangling and unsupervised models with R
- Strong modelling skills in GAMS.

Additional information

Publications

Reyes-Mandujano, I. F., **Fernández, F. J.**, Mercado, W., Gómez, L., & Ponce, R. D. (2020). Revisión Sistemática: análisis de la biodiversidad en las economías rurales mediante el modelo de hogares agrícolas y recomendaciones para futuros reportes. *Economía Agraria y Recursos Naturales-Agricultural and Resource Economics*, 20(1), 53-75. <https://doi.org/10.7201/earn.2020.01.03>

- Fernández, F. J.,** Blanco, M., Ponce, R. D., Vásquez, F. & Roco, L. (2019). Implications of climate change for semi-arid dualistic agriculture: a case study in Central Chile. *Regional Environmental Change*, 19, 89-100. <https://doi.org/10.1007/s10113-018-1380-0>
- Fernández, F. J.,** Ponce, R. D., Vásquez, F., Figueroa, Y., Gelcich, S., & Dresdner, J. (2018) Exploring typologies of artisanal mussel seed producers in southern Chile. *Ocean and Coastal Management*, 158, 24-31. <https://doi.org/10.1016/j.ocecoaman.2018.03.013>
- Blanco, M., Ramos, F., Van Doorslaer, B., Martínez, P., Fumagalli, D., Ceglar, A., & **Fernández, F. J.** (2017). Climate change impacts on EU agriculture: A regionalized perspective taking into account market-driven adjustments. *Agricultural Systems*, 156, 52-66. <https://doi.org/10.1016/j.agsy.2017.05.013>
- Ponce, R. D., **Fernández, F. J.,** Stehr, A., Vásquez, F. & Godoy, A. (2017). Distributional impacts of climate change on basin communities: an integrated modelling approach. *Regional Environmental Change*. <https://link.springer.com/article/10.1007/s10113-017-1152-2>
- Fernández, F. J.,** Ponce, R. D., 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*, 1-17. <http://link.springer.com/article/10.1007/s11269-016-1227-8>
- Francisco J. Fernández** and Maria Blanco (2015). Modelling the Economic Impacts of Climate Change on Global and European Agriculture. Review of Economic Structural Approaches. *Economics: The Open-Access, Open-Assessment E-Journal*, 9 (2015-10): 1 - 53. <http://dx.doi.org/10.5018/economics-ejournal.ja.2015-10> .
- Enciso, S. R. A., Blanco, M., Artavia, M., Ramos, F., **Fernández, F. J.,** Van Doorslaer, B., Fumagalli, D., & Ceglar, A. (2014). Volatility modelling: long-term challenges and policy implications. Scientific Paper nº 5, ULYSSES project, EU 7th Framework Programme, Project 312182 KBBE.2012.1.4 -05, <http://www.fp7-ulysses.eu/39> pp.
- Artavia, M., Blanco, M., Enciso, S. R. A., Ramos, F., Van Doorslaer, B., Fumagalli, D., Niemeyer, S., **Fernández, F.J.,** & M'barek, R. (2014). Production and crop roots (causes?) of volatility measures including partial stochastic simulations of yields and macroeconomic variables. Scientific Paper nº 2, ULYSSES project, EU 7th Framework Programme, Project 312182 KBBE.2012.1.4-05, <http://www.fp7-ulysses.eu/>, 36pp.
- Fernández F.J.,** Blanco M., Ceglar A., M'Barek R., Ciaian P., Srivastava A.K., Lecerf R., Ramos F., Niemeyer S., Van-Doorslaer B. (2013). Still a challenge - interaction of biophysical and economic models for crop production and market analysis, Working Paper nº 3, ULYSSES project, EU 7th Framework Programme, Project 312182 KBBE.2012.1.4-05, <http://www.fp7-ulysses.eu/>, 96 pp.
- Fernández, F.** (2012). 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. Tesis Mg.
- Blanco, M., Bardají, I., Garrido, A., **Fernández, F.,** & Valdés, I. (2011). Revisión del Estado de Conocimiento en Materia de Prospectiva Agraria. Madrid: Ministerio de Medio Ambiente y Medio Rural y Marino, España.
- Fernández F.J.,** Muñoz, M., Ponce, R., Vásquez-Lavín, F., Gelcich, S. (2020) "Mapping Firms adaptive profiles to extreme events considering attitudes, perceptions, and behaviours". 14th Annual Meeting of EfD. Environmental for Development Initiative. Virtual Meeting Nov. 16 -20.
- Fernández F.J.** (2019). "Mapping adaptive behaviours profiles: Past, present and future behaviours of Chilean mussel aquaculture industry under environmental threats". 13th Annual Meeting of EfD. Environmental for Development Initiative. Bogotá, Colombia Nov. 22 -25.
- Vásquez, F., Campos, N., **Fernández F.J.,** Barrientos M., Gelcich, S., Ponce, R. (2019). " Identifying consumers' heterogeneity using latent classes and random parameters discrete choice models". 13th Annual Meeting of EfD. Environmental for Development Initiative. Bogotá, Colombia Nov. 22 -25
- Ponce, R. D., **Fernández F.J.** & Vásquez, F (2019). "The Economics of the Water-Food-Welfare Nexus: Learning from a Hydro-economic model". 13th Annual Meeting of EfD. Environmental for Development Initiative. Bogotá, Colombia Nov. 22 -25
- Fernández F.J.** (2019). "Mussel seed producer heterogeneity, targeting policy actions to specific needs". Seminario "Desafíos de los impactos del cambio global en nuestros océanos: Estrategias de adaptación para enfrentar sus implicancias en la acuicultura de moluscos" Center for the Study of Multiple-drivers on Marine Socio-ecological Systems (MUSELS). Santiago, Chile Ene. 07 -08.

Communications for Congresses

Ponce, R. D., **Fernández F.J.** & Vásquez, F (2019). "The Economics of the Water-Food-Welfare Nexus: Learning from a Hydro-economic model". 4th European Climate Change Adaptation conference. Lisbon, Portugal May. 28 - 31

Fernández F.J. (2017). "Implications of climate change for semi-arid dualistic agriculture: a case study in Central Chile." Quinto Taller en Economía Ambiental y de Recursos Naturales. Núcleo Milenio de Investigación en Economía Ambiental y de Recursos Naturales. Oct. 05-06.

Fernández, F. J. (2016). Modelling Climate change effects at micro-level scale: A Household-model approach for the Maule region. Conference Paper: Encuentro Anual 2016 de la Sociedad de Economía de Chile (SECHI). Sept 1, 2016

Fernández, F. J. (2015). Water Variability and the Economic Impacts on Small-Scale Farmers. A Farm Risk-Based Integrated Modelling Approach. Conference Paper: Encuentro Anual 2015 de la Sociedad de Economía de Chile (SECHI). Sept 25.

Fernández, F., Blanco, M. (2013). Effectiveness of European sustainability criteria on palm oil-based biodiesel: Literature review and quantitative analysis. 5th EAAE PhD Workshop, May 29-31, 2013.

Fernández, F., Blanco, M. (2013). Effectiveness of European sustainability criteria on palm oil-based biodiesel: Literature review and quantitative analysis 133rd EAAE Seminar. "Developing Integrated and Reliable Modeling Tools for Agricultural and Environmental Policy Analysis" Crete (Greece), June 15-16,