#### **CURRICULUM VITAE**

**Personal Information** 

Surname(s) / Name(s) Fernández Jorquera Francisco José

> Affiliation School of Agronomy, Faculty of Scienes, Universidad Mayor

Office Address Camino La Pirámide 5750, Huechuraba, Santiago, Chile

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Webpage personal Google Scholar ResearchGate ResearchID Linkedin Web pages

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

**Assistant Professor** Position held

Main Activities and Responsibilities

Teaching undergraduate courses in Agricultural Economics and Statistical Methods at the Department of Agronomy at Universidad Mayor, Chile.

Degree coordinator of the undergraduate students of agronomy at the Universidad Mayor.

Responsible for the coordination of undergraduate thesis and the final degree exam

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 Teaching Master courses in Environmental Economics and Sustainable Development for the Magíster en

Responsibilities Gestión Integrada: Medio Ambiente, Riesgos Laborales y Responsabilidad Social Empresarial

Universidad de Concepción Institution

**Dates** August 2017 - August 2018

Position held Visiting professor

Main Activities and

Responsibilities program

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

Universidad Santo Tomás Institution

> June 2017 - July 2017 **Dates**

Visiting professor Position held

Main Activities and Teaching Master courses in Environmental Economics and Sustainable Development for the Magíster en

Gestión de la Sustentabilidad Integrada. Responsibilities

Institution Universidad del Desarrollo

Academy / Research

June 2019 - Present **Dates** 

Position held Researcher

Research Line Ecosystem services and human behavior.

> **CAPES** – Center of Applied Ecology and Sustainability Project

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 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 Villarrica lake. Project: "Economic Instruments for pollution control in the basin of Villarrica lake."

Villarica Lake".

Project Counterpart | Ministry of Environment, Chile. - Universidad del Desarollo

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

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Main Activities and Responsibilities

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:

- Research in EU FP7 project: <u>ULYSSES</u>: "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 | February 2018 – April 2018

Position held | External Consulting Inter-American Development Bank (IDB)

Main Activities and Support the strengthening of the methodological framework for the project "Strategic advice for the formulation of

Responsibilities a National Financing Strategy for the implementation of NDC in Chile

Project Counterpart | Ministry of Finance – Chile; Inter-American Development Bank

Page 2/6 - Curriculum vitae Fernández Jorquera Francisco José 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 solidwaste 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

Agronomist

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

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

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#### 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

esity 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				
В2	Proficient user	B2	Proficient user	В1	Proficient user	В1	Proficient user	B2	Proficient user	

<sup>(\*)</sup> 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.

### 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**

**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 Costal Management, 158, 24-31. <a href="https://doi.org/10.1016/j.ocecoaman.2018.03.013">https://doi.org/10.1016/j.ocecoaman.2018.03.013</a>

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. <a href="https://doi.org/10.1016/j.agsy.2017.05.013">https://doi.org/10.1016/j.agsy.2017.05.013</a>

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. <a href="http://dx.doi.org/10.5018/economics-ejournal.ja.2015-10">http://dx.doi.org/10.5018/economics-ejournal.ja.2015-10</a>.

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 n° 5, ULYSSES project, EU 7th Framework Programme, Project 312182 KBBE.2012.1.4 -05, <a href="http://www.fp7-ulysses.eu/,39">http://www.fp7-ulysses.eu/,39</a> 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, <a href="http://www.fp7-ulysses.eu/">http://www.fp7-ulysses.eu/</a>, 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 n° 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.

#### Communications for Congresses

**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.

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,