

## **Curriculum Vitae Inmaculada Batalla**

### **Personal:**

Born May 11th, 1985 (35 years) in Madrid, Spain.

Current place of residence in Bilbao, Spain.



### **Education:**

PhD, *with distinction*, University of The Basque Country, Spain, July 2015.

MSc (Rural Development), Department Agricultural Economics, Córdoba University, Spain, February 2011.

BSc (Agricultural Engineering), Extremadura University, Spain July 2009.

Teaching Certificate, Extremadura University, Spain, June 2009.

### **Additional education:**

Advance Course "The Economics of Natural Resources and the Environment" CIHEAM – IAMZ, Zaragoza. February 2011.

Study case "The EU Leader Evaluation and Self-Evaluation Techniques". Slovak University of Agriculture, Faculty of European Studies and Regional Development. Nitra, Slovak. August 2010.

### **Employments:**

July 2018-Nowadays Postdoctoral researcher in BC3.

August 2016-February 2017. Phitosanitary Inspector in Bilbao Port. Ministry of Agriculture.

May 2016. Freelance Consultant. Organization, management and monitoring as key junior expert of a study tour "Sustainable management of biosphere reserves & organic farming" in the Biosphere Reserve of Urdaibai with collaboration of IDOM.

October 2015- April 2016. Researcher associated in the project "Quality labels in rural areas: new challenges to consumers and producers". University of Sevilla.

September 2011- August 2015. PhD student, Neiker-Tecnalia, Vizcaya, Spain. Dept. of Environment Quality.

August 2010- August 2011. Junior Researcher. Sustainable Development Department. Organic and Mountain Farming Centre. (Junta de Extremadura-INIA). Plasencia, Cáceres, Spain.

### **Honors and Awards:**

PhD fellowship FPI program from the National Institute for Agricultural Research (INIA). Short stay research grants from FPI program from INIA 2013 and 2014 in Aarhus University (Denmark).

### **Scientific expertise:**

With 9 years of experience in the sustainability assessment of farming systems with a multicriteria perspective. Wide experience in holistic analysis of farming systems using economic, social and environmental indicators to give a better comprehension of the situation of primary sector towards its viability

in the long term. I have worked with special emphasis in climate change impacts of livestock through a Life Cycle Assessment approach to use them as start point to draw mitigation and adaptation strategies.

### **Research Projects Participation:**

September 2018- Nowadays "Manure management in dairy cattle systems in Northern Spain: efficiency in nutrient use, GHS mitigations and reduction of carbon footprint" (RTA 2015-00058-C06) I am working on the assessment of the carbon footprint of dairy farms in Northern Spain. Partners: "CIAM ( Galicia ) , SERIDA ( Asturias ) , CIFA ( Cantabria ) , NEIKER ( Basque Country ) e INTIA ( Navarra).

July 2018-February 2020. H2020 Isage "Innovation for Sustainable Sheep and Goat Production in Europe" I have collaborated mainly in the development of the tasks WP 4.3 "Redesign of farms to switch towards more sustainable sheep and goat production using modelling" with Agustín del Prado as task leader and in WP3 "Climate change assessment" Partners: Spain, Greece, UK, Finland, France, Italy, Turkey

October 2015-April 2016. "Quality labels in rural areas: new challenges to consumers and producers" (CSO2013-42468-P). My participation in this project was visiting farms, small and big cheese maker industry to do deep surveys to farmers and cheese makers about their perception of participation in the D.O.P "Queso Idiazabal" in the Basque Country and Navarra Region. I did work before, during the survey process, and the assessment of the surveys. Partners: University of Sevilla (US), University of the Basque Country ( UPV-EHU)

September 2011-August 2015. As PhD student I was working in the project "Effects on the quality and environment of the different systems of dairy small ruminant farms. Employment of economic, social and environmental indicators and final classification systems. Development of NAIA tool, a model which integrates social, economic and environmental assessment and it is able to measure the sustainability of small ruminant systems (RTA2010-00064-C04)" Partners: NEIKER (Basque Country), INTIA (Navarra), Sevilla University and León University. Besides, I have collaborated with the University of Sevilla in a project of organic livestock calculating the carbon footprint of beef, goat and sheep production.

August 2010-August 2011. During the year I was in the Centre of Organic and Mountain Agriculture in Plasencia (Cáceres), I worked in 3 regional projects: assessment of sustainability of mountain farming in Extremadura, sustainability of food chains in Extremadura, perspectives of chestnut sector in Northern Extremadura and impacts and perspectives of Common Agriculture Policy.

### **Languages:**

Spanish as first language. English: advance skills in writing and oral communication (C1 IELTS Certificate January 2016). Euskera: upper intermediate skills in writing and oral communication (B1 certificate June 2017, B2 in preparation) French: intermediate skills in writing and oral communication (B1 level)

### **Technical skills:**

Statistical Analysis using SPSS and R-commander; Programming skills using VBA for Excel and basic knowledge of R; Social Network Analysis using UCINET; and some knowledge of specific programs for agriculture management CROPWAT, AutoCAD, ArcGIS...

### **Publication Record. Inmaculada Batalla**

3 peer review article; 2 book chapter; 4 other publication; more than 10 conferences contributions

**List of publications in international scientific journals:** 3 *in press*

del Prado A, Galán E, **Batalla I**, Pardo G (2020). Impactos y adaptación al cambio climático en rumiantes. ITEA-Información Técnica Económica Agraria 116(5): 461-482. <https://doi.org/10.12706/itea.2020.03> - Ruminants impacts and adaptation to climate change.

Gutiérrez Peña,R., Mena, Y., **Batalla, I.**, Mancilla-Leytón, J.M.(2019) Carbon footprint of dairy goat production systems: a comparison of three contrasting grazing degrees in the Sierra de Grazalema Natural Park ( Southern Spain). Journal of Environmental Management 232:993-998

**Batalla, I.**, Knudsen, M. T., Mogensen, L., Hierro, O. d., Pinto, M., & Hermansen, J. E. (2015). Carbon footprint of milk from sheep farming systems in Northern Spain including soil carbon sequestration in grasslands. Journal of Cleaner Production, 104(0), 121-129.

### **Book chapters**

Mena, Y.; Gutiérrez-Peña, R.; Pérez-Neira, D.; Damián, M.; **Batalla, I**; del Hierro, O. (2014) Impacto de la ganadería ecológica sobre el medio ambiente y su papel en el mantenimiento de la biodiversidad. Junta de Andalucía

Gutierrez, R.; Pérez, D.; **Batalla, I.**; Mena Y. (2014) Estudio de casos de explotaciones sostenibles económica y ambientalmente. Junta de Andalucía

### **Other publications**

Codigo de buenas prácticas en vacuno - Estrategia carbono neutral 2050. Edita: PROVACUNO

**Batalla, I.**; Pardo, G.; del Prado, A. (2020) Gases de efecto invernadero y producción caprina: ¿qué debemos tener en cuenta? Tierras caprinas, 30, pp 10-17.

Mena, Y.; **Batalla, I.**; Gutiérrez-Peña, R; del Hierro, O. (2015). La huella de carbono de la ganadería ecológica de rumiantes: definición y cálculo. Revista de Agricultura y Ganadería Ecológica nº 20. Verano 2015.

**Batalla, I.** (2015) Opportunities and challenges of sheep milk systems towards sustainability. PhD Thesis. University of the Basque Country.

### **Scientific stages**

During my PhD student period I spent two periods of three months each ( 2013 & 2014) in the Group of Farming Systems in the Agroecology Department at AU Foulum, Aarhus University under the supervision of John Hermansen and Marie Trydeman Knudsen.

### **Conference contribution**

Mauleón, J.R.; Intxaurrendienta, J.M.; **Batalla, I.** Guadarrama, O. (2016) Pastores y queserías en la denominación de origen queso idiazabal: acceso a la denominación, apoyo público, y simbolismo del etiquetado. Congreso FES, XII Congreso Español Sociología.

**Batalla, I.**; Pinto, M.; Unamunzaga, O.; Besga, G.; del Hierro, O. (2015) The importance of how we report the results of climate impacts of food production. IV Workshop Red REMEDIA 2015. Oral presentation

**Batalla, I.**, Knudsen, M.T., Mogensen, L., del Hierro, O., Pinto, M., Hermansen, J.E. (2015). Effect of grazing practices in carbon footprint of sheep farming in Northern Spain. IV Workshop Red REMEDIA 2015. Póster

Mandaluniz, N.; Ming A.; **Batalla, I.**, Saéz, J.; del Hierro, O.; Ruiz R. (2015) Efecto del manejo sobre la huella de Carbono en explotaciones de ovino lechero. Actas XL Congreso SEOC.

**Batalla, I.**; Pinto, M.; del Hierro, O. (2014) Environmental, social & economic qualities for sustainable viability of livestock systems. Klimagune Workshop. Opportunities and challenges for rural areas in the context of climate change. Oral presentation.

Alvarez-Esteban, R.; Rodriguez, P.; Hidalgo, C.; Palacios, C.; Revilla, I.; Aguirre, I.; **Batalla, I.**; Eguinoa, P. (2014). Quality of life and quality of work life in organic versus conventional farmers. 18<sup>th</sup> IFOAM ORGANIC WORLD CONGRESS 13- 15 Octubre 2014.

**Batalla, I.**; Gutiérrez-Peña, R.; del Hierro, O.; Pérez-Neira, D.; Mena, Y. (2014) "Estimación de las emisiones de gases de efecto invernadero de la ganadería bovina y ovina ecológicas en dehesas de Andalucía". Congreso SEAE. Vitoria 1-4 Octubre 2014. Oral presentation

**Batalla, I.**; Pinto, M.; Eguinoa, P.; Intxaurrendieta, J.M.; Mangado, J.M.; del Hierro, O. (2014) "Environmental Competences For Sustainability of Small Ruminant Systems in Northern Spain". Animal Change Conference. 19-20 Mayo 2014, Madrid. Póster.

**Batalla, I.**; Pinto, M.; Unamunzaga, O.; Besga, G.; del Hierro, O. (2014) "Integrating social and economic criteria in the carbon footprint analysis in sheep dairy farms" 9th International Conference LCA Food San Francisco . USA, 8-10 October 2014 Póster

**Batalla, I.**; Pinto, M., del Hierro, O. (2014) Environmental, social and economic aptitudes for sustainable viability of sheep farming systems in Northern Spain. 11th European IFSA Symposium, 1-4 April 2014. Berlin, Germany. Oral presentation.

Mena, Y.; Intxaurrendieta, J.M.; Palacios, C.; Gutiérrez, R.; **Batalla, I.**; Hidalgo, C.; Mauleon, J.R.; Álvarez, R.; Marijuan, S.; Aguirre, I.; del Hierro, O.; Eguinoa, P. (2013) "Análisis de la viabilidad socioeconómica de las explotaciones de pequeños rumiantes lecheros en España". Congreso SEOC. Septiembre.

**Batalla, I.**, del Hierro, O., Intxaurrendieta, J.M., Mangado, J.M., Pinto, M., Marijuán, S., Mena, Y., Gutiérrez, R., Hidalgo, C., Palacios, C., Mauleón, J.R., Álvarez, R., Rodríguez, P., Revilla, I., Pérez, D., Soler, M., Aguirre, I., Delgado, M., Fernández, V., Nafarrate, L. y Eguinoa, P. (2013) "Evaluación de sostenibilidad de diferentes sistemas de ganaderías con pequeños rumiantes de aptitud lechera. Empleo de indicadores económicos, sociales y ambientales". Congreso SEOC. Septiembre. Póster.

**Batalla, I.**, Pinto, M., Marijuan, S., del Hierro, O. (2013) "Las explotaciones de ovino de aptitud lechera en el país vasco como elemento generador del paisaje agrario vasco. Implicaciones en la sostenibilidad social." Congreso FES, 10-12 Julio 2013. Oral presentation

del Hierro, O.; Pinto, M.; Marijuán, S.; **Batalla, I.**, (2012) "La huella de carbono como indicador ambiental en la evaluación de la sostenibilidad de explotaciones de ganado ovino de aptitud lechera". "SEOC 2012". Ciudad Real (Spain), 19- 21 Septiembre Poster.

**Batalla, I.**; Pinto, M.; Eguinoa, P.; del Hierro, O. (2012). "Measuring sustainability in sheep and goat dairy farming. The carbon footprint as an environmental indicator. "INTERNATIONAL SYMPOSIUM ON EMISSIONS OF GAS AND DUST FROM LIVESTOCK". Saint-Malo (France), 10-13 Junio. Poster.

Fernández, M.C.;Hernández, S.;**Batalla,I.** (2011): El castaño en Extremadura como promotor de desarrollo rural sostenible. Congreso Economía Agraria. Madrid, Septiembre 2011.

**Batalla, I.**; Gómez, A.C; Ramos,E. (2011). Las marcas de calidad diferenciada como herramienta de Desarrollo Rural Sostenible. Una aplicación al caso de la DOP "Cereza del Valle del Jerte" Congreso Economía Agraria. Madrid, Septiembre 2011. Oral presentation

### **Invited speaker**

January 2021 "Rumiantes y cambio climático Lo bueno y lo malo". Seminario "ganadería y cambio climático. la información para la toma de decisiones". Escuela Técnica Superior de Ingeniería Agronómica. Universidad de Sevilla

July 2020. Seminario web: Uso del suelo ante la emergencia climática: Mesas de debate (II). Participación en la mesa "Transición ecológica y la nueva PAC" Organizado por IHOBE, Gobierno Vasco.

February 2020. "Rumiantes y cambio climático Lo bueno y lo malo". Jornada "El sector caprino ante los retos del futuro" Grupo operativo AMALTEA.

January 2020 "Rumiantes y cambio climático Lo bueno y lo malo". Seminario "ganadería y cambio climático. la información para la toma de decisiones". Escuela Técnica Superior de Ingeniería Agronómica. Universidad de Sevilla.

December 2015.Sostenibilidad en el sector de ovino de leche en el País Vasco. Jornada con controladores lecheros de Álava .Organizada por Neiker Tecnalia en la Granja Modelo de Arkauke.

December 2011. Las marcas de calidad diferenciada como herramienta de Desarrollo Rural Sostenible. Una aplicación al caso de la DOP "Cereza del Valle del Jerte" Invited speaker in the Annual Meeting of the Agrupación de Cooperativas "Valle del Jerte".