

# Tristan Berchoux



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Southampton, United Kingdom



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## About me

My principal research interests lie in the field of spatial planning and sustainable rural development. I am a research fellow in economic geography investigating the impact of climate change on landscapes and livelihoods under different policy scenarios in the Mekong Delta, using the latest econometric modelling and spatial analysis techniques. I have a particular expertise in quantitative modelling applied to rural territories from a social, environmental and economic perspective.



## Methods

**Statistics:** multilevel modelling, generalised linear models, logistic regression, time-series analysis, factor analysis, cluster analysis, econometric modelling of land-use change

**Spatial analysis:** cost-distance analysis, suitability analysis, geostatistics, spatial associations, autocorrelation, landscape metrics

**Qualitative:** political economy analysis, agrarian systems diagnosis, participatory rural appraisals



## IT Skills

**Programming:** R, Matlab

**Statistics:** MLWIN, SPSS, CLUMondo

**GIS:** QGIS, ArcGIS, TerrSet, MCK

**Typesetting:** Office, Markdown, L<sup>A</sup>T<sub>E</sub>X

**Bibliography management:** Mendeley

**Others:** InDesign, Gimp, PowToon



## Languages

**French** ●●●●●●● (Native)

**English** ●●●●●●● (C2)

**Spanish** ●●●●●●● (B1)

**Greek** ●●●●●●● (A2)






## Research experience

- Since 2017 **Postdoctoral Research Fellow**  UK University of Southampton  
Project “Building Resilient Agricultural Systems for the Mekong Delta”
- Spatial analysis of economic infrastructures, natural landscapes and livelihoods to highlight distinctive patterns of socio-ecological systems
  - Developed a spatially-explicit model to integrate land systems analysis, economic modelling with governmental development scenarios to foresee future landscape and livelihood changes under different scenarios of climate change
  - Policy analysis and participatory workshops for sustainable development landscape planning to inform policy
- 2013 *8 months* **Research Associate**  Tanzania & Uganda GRET  
Role of wholesale markets to improve small-scale farmers’ livelihoods and their integration with territorial economic development
- Trend analysis of food prices, access to markets and value-chain diagnosis
  - Knowledge transfer and advocacy to the parliament and funding bodies
- 2011-2012 **Research Associate**  Vietnam CIRAD  
Role of microfinance for rural development through the analysis of the livelihood trajectories of rural communities
- Management and implementation of the microfinance component of a research-led project for local economic development
  - Provided training, coaching and workshop facilitation for field staff and management staff of microfinance institutions
  - Knowledge transfer to the Government and to academic partners



## Teaching experience

- 2016-2018 **Lecturer in Applied Social Sciences**  UK University of Winchester  
Designed and delivered ten undergraduate sessions for the sociology and economics module “Understanding the Development of Urban and Rural Societies” and the geography module “Environment and Development”
- Ruralities & development: local, global issues, management of the commons
  - Rural economics, territorial and landscape transitions
  - Understanding rural societies: approaches and frameworks
  - Working towards sustainable rural societies and global rural futures
  - Research with impact in social sciences
- 2014-2017 **Teaching Assistant in Geography**  UK University of Southampton  
Seminars and supervision of practicals and research projects for undergraduate and postgraduate students
- Advanced Geographical Information Systems - *BSc Geography*
  - Skills and Project Work - *MSc Geography & MSc Economics*
  - Indicators and frameworks in sustainability science - *MSc Sustainability*
  - Integrated modelling processes for sustainability - *MSc Sustainability*
- 2009-2013 **Teaching to students with learning difficulties**  France ESSOR  
One hour each week doing remedial teaching to high-school students with learning difficulties as an educational support



## Development cooperation experience

- 2017 *5 months* **Knowledge Transfer Officer**  France & Morocco IRD  
• Developed a strategy for the knowledge transfer of social sciences for development, which was presented at Innovatives SHS 2017 in Marseille
- Supported the creation of a platform of innovations to answer the SDGs
  - Protection and valorisation of Intellectual Property from the institute’s research teams, including the creation of a scientific board game
  - Established public-private partnerships in multicultural environments
- 2012 *6 months* **Appraisal, Monitoring and Evaluation Manager**  Chad ACTED  
Scientific advisor for the implementation of projects on food security and sustainable economic development, management of the AME department (10 people), supervision of grant proposals and management of a WFP project

## Awards

**2017** - Most Innovative Postgraduate Research Project      ESRC South Coast DTP

**2017** - Best Early Career Researchers Presentation      EGU Conference 2017

**2016** - Best Interdisciplinary Research Presentation      Tropmet Conference 2016

## Grants

**2018** - Competitive funding to participate in the Socio-Spatial Dynamics Summer College      RSA

**2017** - Research and innovation policy scheme to work at IRD      ESRC

**2016** - Research and travel funds within the EU-India Research and Innovation Partnership      EuropAid

**2015** - Enhanced student training fund to participate in GeoStat      ESRC

**2015** - Research grant for a project with Xiamen University about environmental behaviours      ESRC

**2014** - Advanced Quantitative Methods (AQM) enhanced stipend      ESRC

**2014** - Studentship for interdisciplinary study under the Energy, Environment and Resilience pathway      ESRC & CARIAA

**2012** - Grant to conduct the post-harvest national food security assessment of rural households when working as AME Manager for ACTED      WFP

## Education

**2014-2018** **Ph.D.** in Economic and Social Geography      University of Southampton, UK  
 • ESRC Scholarship for Advanced Quantitative Methods  
 • Senior Research Assistant for the research project CARIAA  
 • Thesis: *The determinants of precarious livelihoods in rural India*  
 • Synopsis: After characterising the spatial associations between two levels of capitals with agricultural livelihood activities in a multilevel modelling framework, I investigated how place influences the climatic drivers of livelihood precariousness.

**2009-2013** **Ingénieur Agronome** in Rural Development      Montpellier SupAgro, France  
 • Specialisation in agricultural economics and public policies  
 • Thesis: *Marketing systems in Tanzania, Rwanda and Uganda: the role of bulk-markets to reduce market imperfections and improve small-scale farmers' bargaining power*

**2007-2009** **Classes Préparatoires aux Grandes Écoles**      Lycée du Parc, France  
 Pluridisciplinary course: science (maths, geography, biology, chemistry, physics) and humanities (philosophy, literature, languages)

## Professional development

Ongoing **Macroeconomics for a Sustainable Planet**      UNSDSN  
 MOOC - Exploration of traditional macroeconomic principles and tools updated for the age of sustainable development

2018 **Energetic and ecological transition in Southern countries**      ENS  
 MOOC - Climate change and economic development in the South

2018 **Landscape Ecology**      ETH Zürich  
 MOOC - Theory, methods and tools to understand the landscapes we live in and to solve landscape-related environmental problems

2018 **Introduction to Econometrics**      Université Catholique de Louvain  
 MOOC - Construction of econometric models based on case studies from finance and economics

2018 **Socio-Spatial Dynamics Summer College**      Regional Studies Association  
 Novel Approaches to Sustainable and Inclusive Development

2018 **Sustainable Food Systems: A Mediterranean Perspective**      UNSDSN  
 MOOC - Challenges and opportunities of the agricultural sector in the Mediterranean basin

2016 **Academic Practice**      University of Southampton  
 Module 1 - Introduction to learning design: The practice of teaching  
 Module 2 - Developing learning design: Supporting learning

2015 **GeoStat Summer School**      Lancaster University  
 Statistical analysis of spatial and spatio-temporal data in R and Open Source GIS

2015 **Hierarchical modelling of spatial and temporal data**      S3RI  
 Statistical inference methods appropriate for analysing various types of spatially point referenced data

2015 **Statistical programming in R**      University of Southampton  
 Implementation of General Linear Model and Mixed Linear Models

2015 **Disasters and Ecosystems: Resilience in a changing climate**      UNEP  
 MOOC - Environment, disasters and disaster risk reduction

## Hobbies



Violin (22 years)  
Viola (13 years)  
Guitar (15 years)



Handball (12 years)  
Cycling (9 years)  
Snowboard (14 years)



Photography (10 years)  
Scouting (9 years)

## References

✉ **Prof. Craig Hutton**  
Supervisor (University of Southampton)

✉ **Prof. Tim Hall**  
Employer (University of Winchester)

✉ **Prof. Betty Wampfler**  
Supervisor (Montpellier SupAgro)

✉ **Dr. Guillaume Duteurtre**  
Employer (CIRAD)

## Peer-reviewed publications

- 2019 **Collective influence of household and community capitals on agricultural employment as a measure of rural poverty in the Mahanadi Delta, India** Ambio  
*T. Berchoux*, G.R. Watmough, F.A. Johnson, C.W. Hutton, P.M. Atkinson
- 2019 **Spatial associations between household and community livelihood capitals in rural territories** Applied Geography  
*T. Berchoux*, C.W. Hutton
- 2018 **China-to-UK student migration and pro-environmental behaviour change: a social practice perspective** Sociological Research Online  
R. Tyers, *T. Berchoux*, K. Xiang, X. Yi Yao

## Selected conference papers

- 2018 **Global change effects on livelihoods in the Mekong** RSA 2018, Italy  
*T. Berchoux*, C.W. Hutton, C.T. Hill, S.E. Darby
- 2018 **Using landscape typologies to characterise the determinants of precarious rural livelihoods** AAG 2018, USA  
*T. Berchoux*, G.R. Watmough, C.W. Hutton, P.M. Atkinson, S.E. Darby
- 2018 **Using landscape typologies and census data to unbox livelihood systems: a comprehensive spatial approach for rural planning** Expert Conference on Socio-Ecological Systems FAO 2018, Italy  
*T. Berchoux*, C.W. Hutton, C.T. Hill, S.E. Darby
- 2017 **Livelihood profiling and sensitivity of livelihood strategies to land cover dynamics and agricultural variability** EGU 2017, Austria  
*T. Berchoux*, C.W. Hutton, F.A. Johnson, G.R. Watmough, P.M. Atkinson
- 2016 **Associations between climate and agricultural production and mitigating role of livelihood capitals** Tropmet 2017, India  
*T. Berchoux*, C.W. Hutton, G.R. Watmough, F.A. Johnson, P.M. Atkinson
- 2016 **Sensitivity of livelihood strategies to flood risk and livelihood capitals in the coastal plains of Odisha, India** RGS-IBG 2016, UK  
*T. Berchoux*, C.W. Hutton, G.R. Watmough, F.A. Johnson, P.M. Atkinson
- 2016 **Adaptation to climate variability in rural communities: a livelihood perspective** Climate Change: Society, Governance & Economics, UK  
*T. Berchoux*