

# Alban THOMAS

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French citizenship. Born January 24, 1963 in Boulogne-Billancourt (France)

Fields of expertise: Agricultural economics; environmental and resource economics; food security; statistics and econometrics.

## Positions

- January 2024- : Senior researcher, UMR GAEL (Grenoble Applied Economics Lab), Grenoble.
- July 2021 – December 2023: Senior researcher, Paris-Saclay Applied Economics, University of Paris-Saclay, and Rural Development Observatory, Toulouse.
- June 2021- : Deputy Scientific Directorate Environment, INRAE
- September 2016 – June 2021: Senior researcher, Toulouse School of Economics.
- January 2014 – December 2020: Co-Director of the INRA-CIRAD multidisciplinary (flagship) programme GloFoodS (Transitions Towards Global Food Security, URL: <https://www.inrae.fr/actualites/transitions-securite-alimentaire-mondiale-bilan-du-metaprogramme-recherche-glofoods>).
- July 2013 – June 2021: Head of the Social Science Division (EcoSocio), INRAE
- June 2004 - June 2013: Deputy Head of the Social Science Division (SAE2), INRA
- April 1999 - August 2016: Senior Researcher, Laboratory of Environmental and Resource Economics (LERNA)
- July 1990 – March 1999: Junior Research Scientist, Markets and Quantitative Economics (MMQ) research unit, INRAE.

## Education

- Ph.D. in Economics, University of Toulouse, 1989: Financial applications of AutoRegressive Conditional Heteroskedasticity (ARCH) models (supervisor: Professor Jean-Pierre Florens).
- Habilitation to supervise doctoral research, University of Toulouse, 1994 (committee: Eric Renault, Jean-Pierre Florens, Jean-Jacques Laffont, Alain Trognon and Quang Vuong).

## Funded projects

1/ Project SpaBio, a bioeconomic multidisciplinary exercise for decision making regarding the management of exotic invasive species.

Funding from Biosefair Metaprogramme (INRAE). Position: participant (WP on economics of biological invasions), 2022-2024.

2/ Cofund EJP Soil, Project Road4Schemes (Roadmap for carbon farming schemes).

Position: participant, work package WP4 (A roadmap for improving incentives).

3/ Project ATCHA (Accompanying The adaptation of irrigated agriculture to climate CHAnge).

ANR (French National Research Agency, call for proposals PNC). Position: task co-ordinator (with Laurent Ruiz), 2017-2022.

4/ Economic analysis of water management in Egypt: Literature review, policy options and recommendations.

American University in Cairo, Alternative Policy Solutions' Project. April 2018. Position: senior expert.

5/ Cost-effectiveness of agri-environmental measures and impacts of agricultural policies on the environment and productivity growth

OECD, Paris, October 2017- March 2018. Position: senior expert.

6/ Economic and statistical analysis of the targeting policies for WFP food assistance to Syrian refugees in Lebanon.

World Food Programme, Beirut, Lebanon, October-December 2015. Position: senior expert.

7/ Economic analysis of invasive species management: spatial and dynamic dimensions.

Research contract INRA-ONEMA (French Office for Water and Aquatic Ecosystems).

January 2014-December 2016. Position: co-ordinator.

- 8/ Adaptation to climate change and irrigated agriculture in southern India  
 Research project funded by the Indian-French Committee for Advanced Research (Cefipra), October 2012-December 2015, and by the I.N.R.A. Metaprogramme ACCAF (2012-2014).  
 Position: co-ordinator.
- 9/ Evaluation of the economic and health impacts of a reduction in pesticide use for the Adour-Garonne river basin.  
 Research contract for the Adour-Garonne water agency, June 2010-June 2013. Position: co-ordinator
- 10/ Economic assessment of the French water policy: qualitative and quantitative aspects.  
 Research contract INRA-ONEMA (French Office for Water and Aquatic Ecosystems).  
 January 2010-December 2012. Position: co-ordinator.
- 11/ NOx emissions from cement industry in France: micro-econometric analysis on pollution specific factors and abatement-technology adoption.  
 Research contract for INERIS (Institute for Research on Industrial Risk), June 2009-December 2009.  
 Position: co-ordinator.
- 12/ Predictions of Green House Gases emissions from agriculture and forestry in France, 2010 and 2020.  
 Research contract for the French Ministry of Agriculture, June 2007-January 2008. Position: co-ordinator (with Stéphane De Cara)
- 13/ Market- and non-market impacts of agricultural and environmental public policy reforms  
 ANR research project, 2005-2008. Position: co-ordinator (11 research teams)
- 14/ Evaluation of the public-private price gap in the French water industry  
 French Ministry of the Environment, 2003-2005, research contract. Position: co-ordinator
- 15/ Industrial water demand in the Paraiba do Sul river basin, Brazil  
 Brazil, June 2004-December 2004, for United Nations Development Program and the Brazilian Applied Economics Institute (IPEA). Position title: consultant
- 16/ Lebanese trade under Preferential Trade Agreements with the EU and Egypt  
 Lebanon, February - July 2003, for the Lebanese Ministry of the Economy and Trade (B. Fleyhane).  
 Position title: leading consultant.
- 17/ Statistical analysis of price differentials in French water utilities  
 France, April 2003-April 2005, for the French Ministry of the Environment. Position title: co-ordinator.
- 18/ Water charge instruments for environmental management in Latin America  
 Brazil, May 2002-December 2002, for the Inter-American Development Bank (IADB), in collaboration with IPEA (Instituto de Pesquisa Económica Aplicada, Rio de Janeiro, Brazil). Position title: consultant
- 19/ Impact of the Association Agreement between Lebanon and the European Union  
 Lebanon, February - July 2000, for the European Commission. Position title: consultant, expert on agriculture.
- 20/ Optimal taxation of nitrogen fertilisers in agriculture  
 France, May - August 2000. for the Ministry of the Environment. Position title: scientific expert
- 21/ Implementation of the polluter-payer principle and its impact on qualitative and quantitative water management in industry  
 France, January - December 1999, for the Board of French Water Agencies. Position title: scientific expert
- 22/ Quantitative analysis of residential water demand and household behaviour  
 France, October 1997 - December 1999, for the Compagnie Générale des Eaux. Position title: scientific expert

## Publications in refereed journals

(\*) indicates list of authors in non-alphabetical order (not common practice in most economics journals)

1. Courtois, P., C. Martinez and A. Thomas, 2023. Spatial priorities for invasive alien species control in protected areas. *Science of The Total Environment* 878, 162675. <https://doi.org/10.1016/j.scitotenv.2023.162675>
2. (\*) Jamaluddine, Z., G. Safadi, A. Irani, N. Salti, J. Chaaban, S. Abdulrahim, A. Thomas and H. Ghattas, 2023. Inequalities in Wellbeing in Lebanese Children and Different Refugee Subpopulations: A Multidimensional Child Deprivation Analysis. *Child Indicators Research*. <https://doi.org/10.1007/s12187-023-10040-2>. Online June 6, 2023.
3. Chakir, R. and A. Thomas, 2022. Unintended Consequences of Environmental Policies: The Case of Set-aside and Agricultural Intensification. *Environ Model Assess*. <https://doi.org/10.1007/s10666-021-09815-0>

4. Minviel, J.J., M. Fares, J.M. Blazy and A., 2022. Technical efficiency and complementarity of agroecological innovations in French West Indies banana production. *Applied Economics Letters*. Published online 19 July 2022. <https://doi.org/10.1080/13504851.2022.2103074>
5. (\*) Blazy, J.M, J. Subervie, J. Paul, F. Causeret, L. Guindé, S. Moulla, A. Thomas and J. Sierra, 2021. Ex-ante assessment of the cost-effectiveness of public policies to sequester carbon in soils. *Ecological Economics* 190, 107213.
6. (\*) Caron, P., M. van Ittersum, T. Avermaete, G. Brunori, J. Fanzo, K. Giller, E. Hainzelin, J. Ingram, L. Korsten, Y. Martin-Prével, M. Osiru, C. Palm, M. Rivera Ferre, M. Rufino, S. Schneider, A. Thomas and D. Walker, 2021. Statement based on the 4<sup>th</sup> international conference on global food security – December 2020: Challenges for a disruptive research Agenda. *Global Food Security* 30, 100554. <https://doi.org/10.1016/j.gfs.2021.100554>
7. (\*) Thomas, A., C. Lamine, B. Allès, Y. Chiffolleau, A. Doré, S. Dubuisson-Quellier and M. Hannachi, 2020. The key roles of economic and social organization and producer and consumer behaviour towards a health-agriculture-food-environment nexus: recent advances and future prospects. *Review of Agricultural, Food and Environmental Studies* 101, 23-46.
8. Soler, L.G. and A. Thomas, 2020. Is there a win-win scenario with increased beef quality and reduced consumption. *Review of Agricultural, Food and Environmental Studies* 101, 91-116.
9. Farès, M., S. Raza and A. Thomas, 2018. Is there complementarity between labels and brands? Evidence from small French co-operatives. *Review of Industrial Organization* 53(2), 367-395.
10. Chaaban, J., H. Ghattas, A. Irani and A. Thomas, 2018. Targeting mechanisms for cash transfers using regional aggregates. *Food Security* 10(2), 457-472.
11. (\*) Robert, M., A. Thomas, M. Sekhar H. Raynal, E. Casellas, P. Casel, P. Chabrier, A. Joannon and J.E. Bergez, 2018. A dynamic model for water management at the farm level integrating strategic, tactical and operational decisions. *Environmental Modelling and Software* 100, 123-135.
12. (\*) Robert, M.A., J.E. Bergez and A. Thomas, 2018. A stochastic dynamic programming approach to analyze adaptation to climate change - application to groundwater irrigation in India. *European Journal of Operational Research* 265 (3), 1033-1045 (March).
13. (\*) Robert, M.A., A. Thomas, M. Sekhar, S. Badiger, L. Ruiz, H. Raynal and J.E. Bergez, 2017. Adaptive and dynamic decision-making processes: A conceptual model of production systems on Indian farms. *Agricultural Systems* 157, 279-291.
14. Thomas, A. and V. Zaporozhets, 2017. Bargaining over Environmental Budgets: A Political Economy Model with Application to French Water Policy. *Environmental and Resource Economics* 68, 227–248.
15. (\*) Robert, M., A. Thomas, M. Sekhar, S. Badiger, L. Ruiz, M. Willaume, D. Leenhardt and J.-E. Bergez, 2017. Farm Typology in the Berambadi Watershed (India): Farming Systems Are Determined by Farm Size and Access to Groundwater. *Water* 9(51), 1-21.
16. Berthomé, G. El Karim and A. Thomas, 2017. A Context-based Procedure for Assessing Participatory Schemes in Environmental Planning. *Ecological Economics* 132, 113-123.
17. (\*) Robert, M.A., A. Thomas et J.E. Bergez, 2016. Processes of adaptation in farm decision-making models. A review. *Agronomy for Sustainable Development*, 36-64.
18. (\*) Tago, D., J.K. Hammitt, A. Thomas and D. Raboisson, 2016. The impact of farmers' strategic behavior on the spread of animal infectious diseases. *PLoS ONE* 11(6): e0157450.
19. (\*) Robert, M.A., J. Dury, A. Thomas, O. Therond, M. Sekhar, S. Badiger, L. Ruiz and J.E. Bergez, 2016. CMFDM: A methodology to guide the design of a conceptual model of farmers' decision-making processes. *Agricultural Systems* 148, 86–94.
20. (\*) Grout, C., J. Cavailhès , C. Détang-Dessendre and A. Thomas, 2016. Is sprawling residential behavior influenced by climate? *Land Economics* 92(2), 203-219.
21. (\*) Habets, F., Merot, P., Itier, B. and A. Thomas, 2015. Anticipating a decrease in water resources.. *Pour la Science* (French edition of *The Scientific American*), 26-29.
22. (\*) Barlagne, C., P. Bazoché, A. Thomas, H. Ozier-Lafontaine, F. Causeret and J.M. Blazy, 2015. Promoting local foods in small states: the role of information policies. *Food Policy* 57, 62-72.
23. Carpentier, A., A. Gohin, P. Sckokai and A. Thomas, 2015. Economic modelling of agricultural production: past advances and new challenges. *Review of Agricultural and Environmental Studies* 96, 131-165 doi:10.4074/S1966960715001071
24. (\*) Lescurret, F., Magda, D., Richard, G., Adam-Blondon, A.-F., Baudry, J., Bardy, M., Doussan, I., Dumont, B., Lefèvre, F., Litrico, I., Martin-Clouaire, R., Montuelle, B., Pellerin, S., Plantegenest, M., Tancogne, E., Thomas, A., Guyomard, H., Soussana, J.-F., 2015. . A social-ecological approach to managing multiple agro-ecosystem services. *Current Opinion in Environmental Sustainability* 14, 68–75. DOI : 10.1016/j.cosust.2015.04.001.

25. (\*) Tago, D., J.K. Hammitt, A. Thomas and D. Raboisson, 2014. Cost assessment of the movement restriction policy in France during the 2006 bluetongue virus episode (BTV-8). *Preventive Veterinary Medicine* 117 (3-4), 577-589.
26. Reynaud, A. and A. Thomas, 2013. Firm's profitability and regulation in water and network industries: An empirical analysis. *Utilities Policy* 24, 48-58.
27. Diakité, D. and A. Thomas, 2013. Structure des coûts d'alimentation en eau potable : une analyse sur un panel d'unités de production ivoiriennes. *Recherches Economiques de Louvain* 79(1), 83-114.
28. Diakité, D. and A. Thomas, 2012. La demande domestique d'eau potable : Une étude sur un panel de communes ivoiriennes. *L'Actualité Economique* 87(3), 269-299.
29. Féres, J., A. Reynaud and A. Thomas, 2012. Water Reuse in Brazilian Manufacturing Firms. *Applied Economics* 44(11), 1417-1427.
30. Blazy, J.M., A. Carpentier et A. Thomas, 2011. The Willingness to Adopt Agro-ecological Innovations: Application of Choice Modelling to Caribbean Banana Planters. *Ecological Economics* 72, 140-150.
31. Ramadan, R. and A. Thomas, 2011. Evaluating the impact of reforming the food subsidy program in Egypt: A Mixed Demand approach. *Food Policy* 36, 637-645.
32. Lacroix, A. and A. Thomas, 2011. Estimating the environmental impact of land and production decisions with multiple selection rules and panel data. *American Journal of Agricultural Economics* 93(3), 784-802. DOI: 10.1093/ajae/aar008.
33. Kaminski, J. and A. Thomas. Land Use, 2011. Production Growth and the Institutional Environment of Smallholders: Evidence from Burkinafaso Cotton Farmers. *Land Economics* 87, 161-182.
34. Eeckhoudt, L., A. Thomas and N. Treich, 2011. Correlated risks and the value of information. *Journal of Economics* 102, 77-87.
35. (\*) Blazy, J.M., Ph. Tixier, A. Thomas, H. Ozier-Lafontaine, F. Salmon and J. Wery, 2010. BANAD: A farm model for ex ante assessment of agro-ecological innovations and its application to banana farms in Guadeloupe. *Agricultural Systems* 103, 221-232.
36. (\*) Blazy, J.M., H. Ozier-Lafontaine, T. Doré, A. Thomas and J. Wery, 2009. A methodological framework that accounts for farm diversity in the prototyping of crop management systems. Application to banana-based systems in Guadeloupe. *Agricultural Systems* 101, 30-41.
37. Diakité, D., A. Semenov and A. Thomas, 2009. A proposal for social pricing of water supply in Côte d'Ivoire. *Journal of Development Economics* 88, 258-268.
38. Groom, B., C. Nauges, P. Koundouri and A. Thomas, 2008. The story of the moment: Risk adverse Cypriot farmers respond to drought management. *Applied Economics* 40, 315-326.
39. Féres, J., A. Reynaud, R. Seroa da Motta and A. Thomas, 2008. Competitiveness and Effectiveness Concerns in Water Charge Implementation: A Case Study of the Paraíba do Sul River Basin, Brazil. *Water Policy* 10(6), 595-612.
40. Chaaban, J. and A. Thomas, 2008. A structural model for evaluating Preferential Trade Agreements. *Journal of Industry, Competition and Trade* 8, 73-88.
41. Chakravorty, U., C. Nauges and A. Thomas, 2008. Clean Air Regulation and Heterogeneity in U.S. Gasoline Prices. *Journal of Environmental Economics and Management* 55, 106-122.
42. Grolleau, G., N. Mzoughi and A. Thomas, 2007. What drives agri-food firms to register for an Environmental Management System? *European Review of Agricultural Economics* 34, 233-255.
43. Grolleau, G. and A. Thomas, 2007. Adoption of Environmental Management Systems by Farmers: An Empirical Application to ISO 14001. *Journal of Agricultural and Applied Economics* 39(3), 523-540.
44. Carpentier, A., C. Nauges, A. Reynaud and A. Thomas, 2006. Effets de la délégation sur le prix de l'eau potable en France. Une analyse à partir de la littérature sur les effets de traitement. *Economie et Prévision* 174, 1-19.
45. Boumahdi, R. and A. Thomas, 2006. Instrument relevance and efficient estimation with panel data. *Economics Letters* 93, 305-310.
46. Thomas, A., 2006. Consistent estimation of binary-choice panel data models with heterogeneous linear trends. *Econometrics Journal* 9(2), 177-195.
47. (\*) Simtowe, F., J. Mduma, A. Phiri, A. Thomas and M. Zelle, 2006. Can risk aversion towards fertilizer explain part of the non-adoption puzzle for hybrid maize? Empirical evidence from Malawi. *Journal of Applied Sciences* 6(7), 1490-1498.
48. Bontems, P. and A. Thomas, 2006. Regulating nitrogen pollution with risk-averse farmers under asymmetric information and moral hazard». *American Journal of Agricultural Economics* 88(1), 57-72.
49. Boumahdi, R., J. Chaaban and A. Thomas, 2006. Import demand estimation with country and product effects: Application of multi-way unbalanced panel data models to Lebanese imports. In *Panel Data*

- Econometrics: Theoretical contributions and empirical applications.* (B.H. Baltagi, ed.), chap. 8, pp. 193-228, Elsevier, Amsterdam.
50. Reynaud, A. and A. Thomas, 2005. Demande domestique en eau et choix de délégation : le cas français. *Revue Economique* 56, 1148-1165.
  51. Lavergne, P. and A. Thomas, 2005. Semiparametric Estimation and Testing in Models of Adverse Selection, with an Application to Environmental Regulation. *Empirical Economics* 30(1), 171-192.
  52. Chakir, R. and A. Thomas, 2003. Simulated Maximum Likelihood Estimation of Firm Demand Systems with Corner Solutions and Panel Data. *Revue d'Economie Politique* 113(6), 773-799.
  53. Thomas, A., 2003. A dynamic model of on-farm integrated nitrogen management. *European Review of Agricultural Economics* 30, 439-460.
  54. Belhaj Hassine, N. and A. Thomas, 2001. Aversion au risque des agriculteurs et décisions de production : le cas de l'agriculture irriguée en Tunisie (in French). *Economie Rurale* 266, 91-108.
  55. Garcia, S. and A. Thomas, 2001. The Structure of Municipal Water Supply Costs: Application to a Panel of French Local Communities. *Journal of Productivity Analysis* 16, 5-29.
  56. Bontems, P. and A. Thomas, 2000. Information Value and Risk Premium in Agricultural Production: The case of Split Nitrogen Application for Corn. *American Journal of Agricultural Economics* 82, 59-70.
  57. Nauges, C. and A. Thomas, 2000. Dynamique de la consommation d'eau potable des ménages : une étude sur un panel de communes françaises (in French). *Economie et Prévision* 143-144, 175-184.
  58. Nauges, C. and A. Thomas, 2000. Privately-operated Water Utilities, Municipal Price Negotiation, and Estimation of Residential Water Demand: The Case of France. *Land Economics* 76(1), 68-85.
  59. Chavas, J.-P. and A. Thomas, 1999. A Dynamic Analysis of Land Prices. *American Journal of Agricultural Economics* 81, 772-784.
  60. Boumahdi, R. and A. Thomas, 1997. Estimation des modèles de données de panel avec régresseurs temporels (in French). *Annales d'Economie et de Statistique* 46, 23-48.
  61. Salanié, F. and A. Thomas, 1996. Evaluer l'efficacité d'une régulation d'agents pollueurs. *Cahiers d'Economie et Sociologie Rurales* 39/40, 15-35.
  62. Thomas, A., 1995. Regulating Pollution under Asymmetric Information: The Case of Industrial Wastewater Treatment. *Journal of Environmental Economics and Management* 28, 357-373.
  63. Thomas, A., 1994. Régulation et performances de l'activité de dépollution : une analyse économétrique sur données individuelles (in French). *L'Actualité Economique* 70, 125-142.
  64. Boumahdi, R. and A. Thomas, 1992. Estimation des Modèles à deux Régimes avec des Données de Panel (in French). *Annales d'Economie et de Statistique* 28, 125-142.
  65. Boumahdi, R. and A. Thomas, 1991. Testing for Unit Roots using Panel Data: Application to the French Stock Market Efficiency. *Economics Letters* 37, 77-79.
  66. Thomas, A., 1991. Estimation d'un Modèle CAPM avec Primes de Risque Variables (in French). *Annales d'Economie et de Statistique* 22, 153-163.

## Books and book chapters

67. (\*) Alban Thomas, Arlène Alpha, Aleksandra Barczak and Nadine Zakhia-Rozis (Eds.), 2024. *Sustainable Food Systems for Food Security. Need for combination of local and global approaches.* 246 pages. Quae Editions, Versailles. <https://www.quae.com/produit/1857/9782759238538/durabilite-des-systemes-pour-la-securite-alimentaire>
68. Courtois, P., C. Figuières, C. Martínez and A. Thomas, 2023. L'économie des invasions biologiques : vers une hiérarchisation des stratégies de gestion. In *Crises sanitaires en agriculture*, C. Lannou, J.-Y. Rasplus, S. Soubeyrand, M. Gautier and J.-P. Rossi eds., pp. 238-250. Versailles: Quae Editions. ISBN 978-2-7592-3482-0.
69. Thomas A., 2021. Of Particles and Molecules: Application of Particle Filtering to Irrigated Agriculture in Punjab, India. In: Daouia A., Ruiz-Gazen A. (eds) *Advances in Contemporary Statistics and Econometrics*. Springer, Cham. [https://doi.org/10.1007/978-3-030-73249-3\\_35](https://doi.org/10.1007/978-3-030-73249-3_35)
70. (\*) Caquet, T., C. Gascuel, M. Tixier-Boichard, B. Dedieu, C. Détang-Dessendre, P. Dupraz, P. Favardin, L. Hazard, P. Hinsinger, F. Lescourret, I. Litrico-Chiarelli, F. Médale, H. Monod, S. Petit, X. Reboud, L. Roques, A. Thomas, H. de Vries and J.F. Soussana, 2020. Agroecology: *Research for the transition of agri-food systems and Territories*. T. Caquet, C. Gascuel and M. Tixier-Boichard, eds. Quae Editions, Paris.
71. Destandau, F., S. Garcia, S. Thoyer and A. Thomas, 2020. *Aspects économiques* (chapter 11), in *L'eau en milieu agricole. Outils et méthodes pour une gestion intégrée et territoriale* (O. Barreteau, D. Leenhardt and M. Voltz, eds.). Quae Editions, Paris.
72. Dupraz, P., L.P. Mahé and A. Thomas, 2019. *Paiements pour services environnementaux, biens publics et fédéralisme fiscal. Enjeux pour la PAC. L'agriculture et les paiements pour services environnementaux*.

- Quels questionnements juridiques ?, Presses Universitaires de Rennes*, 435 p., 2019, 978-2-7535-7601-8. [hal-02283459](https://hal.archives-ouvertes.fr/hal-02283459). Presses Universitaires de Rennes.
73. Thomas, A., 2017. Water cost and price (in French). In *L'Atlas de l'eau et des océans*. Special issue *Le Monde et La Vie* (November), 94-95.
  74. (\*) Magrini, M.B., A. Thomas and A. Schneider, 2015. Analyses multi-enjeux et dynamiques socio-économiques des systèmes de production avec légumineuses. In *Les légumineuses pour des systèmes agricoles et alimentaires durables* (eds. Anne Schneider and Christian Huygue), pp. 339-413. Editions Quae, Paris.
  75. Abou Ali, H. and A. Thomas, 2012. Regulating traffic as a means of reducing Greenhouse Gas emissions: The case of Greater Cairo, Egypt. In *Economic Incentives and Environmental Regulation. Evidence from the MENA Region* (ed. H. Abou Ali). Edward Elgar, Cheltenham.
  76. C. Nauges and A. Thomas, 2011. The pricing of urban water services: the case of France. In *Water Resources, Planning and Management: Challenges and Solutions* (Q. Grafton ed.) Cambridge University Press.
  77. Doré, Th. and A. Thomas, 2010. Agriculture and natural resources (chapter 7), in *L'Agriculture Française*. La Documentation Française, Paris.
  78. Boumahdi, R. and A. Thomas, 2008. Endogenous regressors and correlated effects. In *The Econometrics of Panel Data – A handbook of the theory with applications* (L. Matyas and P. Sevestre eds.), 3rd edition, Kluwer Academic Publishers, Dordrecht.
  79. Gozlan, E., L. Loope and A. Thomas, 2006. Impacts de l'introduction d'espèces envahissantes en Nouvelle-Calédonie : Aspects méthodologiques pour l'évaluation économique et pistes de réflexion pour un partage efficace des coûts. In *Espèces envahissantes dans l'archipel néo-calédonien*. IRD Editions, Paris.
  80. Gozlan, E. and A. Thomas, 2006. Les stratégies d'évaluation des politiques de lutte contre les espèces envahissantes : Inconvénients et difficultés de l'analyse coûts/bénéfices, méthodes alternatives de critères de décision. In *Espèces envahissantes dans l'archipel néo-calédonien*. IRD Editions, Paris.
  81. Guerrero Rojas, H. and A. Thomas, 2004. Water Management in Mexico. In *Econometrics Informing Natural Resources Management*. Koundouri, P. Ed., Edward Elgar, 336 pages, November.
  82. (\*) Seroa da Motta, R., Thomas, A., Saade Hazin, L., Féres, J.G., Nauges, C. and Saade Hazin, 2004. Economics instruments for water management. Edward Elgar, 130 pages.
  83. Garcia, S. and A. Thomas, 2002. Regulation of Public Utilities under Asymmetric Information: The Case of Municipal Water Supply in France. In *Current Issues in the Economics of Water Resource management. Theory, Applications and Policies* (Ed. P. Pashardes, T. Swanson and A. Xepapadeas), Kluwer Academic Publishers.
  84. Salanié, F. and A. Thomas, 2002. Environmental policy and contract-based regulation: An econometric approach with an application to French Water Agencies (in French). In *Régulation environnementale. Jeux, coalitions, contrats*, Gilles Rotillon (Ed.), Economica, Paris.
  85. Thomas, A., 2000. Econometrics of qualitative variables (in French). Dunod, Collection Enseignement Supérieur, Paris.
  86. Rochet, J.-C. and A. Thomas, 1993 La théorie de l'organisation industrielle. Economica, translation of Jean Tirole."The Theory of Industrial Organization, MIT Press.

#### Other publications

87. (\*) Blanchet, K. et al., 2018. Support for UNRWA's survival. *The Lancet* 392 (September 22), 1009.
88. Thomas, A., 2018. Water Management in Egypt. Alternative Policy Solutions, American University of Cairo.
89. Thomas, A., 2016. Reducing air pollution in Cairo: raise user costs and invest in public transit. ERF Policy Brief, Economic Research Forum, Cairo (Egypt).
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#### **Teaching and research supervision**

- Econometrics of Natural Resources and the Environment, MSc. degree in environmental economics, University of Toulouse, 1996-2003.
- Water Economics, MSc. degree in environmental economics, University of Toulouse, 1997-2013.
- Environmental Economics. Master “Agro-food chain”, University of Toulouse, 2004-2006.
- The econometrics of the firm. Master EMO, University of Toulouse, 2005-2013.
- Supervision and co-supervision of Ph.D dissertations in economics:
  - Nadia Bel Haj Hassine (Water tariffs and irrigated agriculture: the case of Tunisia), with Michel Moreaux, University of Toulouse, 1994-1997.
  - Céline Nauges (The value of water and residential water use, 1996-1999)
  - Serge Garcia (An economic analysis of supply cost and network economies of scale in water utilities, 1997-2001);
  - José Gustavo Féres (Assessing the impact of water policy instruments on the Brazilian use sectors, 2002-2007) ;
  - Sébastien Foudi (Agricultural land allocation and environmental policy, 2002-2008) ;
  - Daouda Diakité (Residential water use in Côte d'Ivoire: an economic analysis of demand, supply costs, and pricing, 2003-2007) ;
  - Marton Csillag (Micro-econometric analysis of the Hungarian labor market in transition, 2002-2007) ;
  - Najwa Yacoub (Impact of fiscal and trade policy reforms in Lebanon, with François Gardes, since 2004);
  - Claire Mosnier (Adaptation of suckler cow farms to weather and beef price risks: Modelling approaches, with Jean-Baptiste Coulon, 2006-2009);
  - Karim Berthomé (Socio-economic analysis of local decisions in the waste treatment industry, with Marc Mormont, 2004-2011) ;
  - Ali Zeggagh (An economic analysis of water pricing in Algeria, with Mohamed Yassine Ferfera, 2006-2011) ;
  - Racha Ramadan (Economic analysis of food subsidy policies in Egypt, 2006-2010);
  - Shagun Khare (The impact of the Indian agricultural procurement policy on groundwater resources, 2012-2017);
  - Marion Robert (Decisions in agro-economic models with application to irrigated agriculture in India, with Jacques-Bergez, University of Toulouse, 2013- 2016);
  - Jacky Paul (Conditions for adoption of compost-based recycling in the French West Indies, with Jean-Christophe Bureau, 2014-2017).

- Damian Tago (Essays in Animal Health Economics and Risk Communication), with James K. Hammitt, University of Toulouse, 2012-2015.

### **Organisation of conferences, workshops and summer schools, and scientific boards**

- Scientific Programme committee of the 25<sup>th</sup>, 26<sup>th</sup> and 27<sup>th</sup> European Association of Environmental and Resource Economists conference, Berlin, 2020 (on line) and 2021, Rimini 2022.
- Scientific board of the Global Food Security international conference (GFS), Montpellier, 15-19 June 2020.
- Co-organisation of invited session “Trust – Institutional frameworks – Methodological Issues”, International Conference of Agricultural Economists, Vancouver (Canada), July 18 2018 (with Mary Bohman USDA-ERC and Martin Banse Thünen Institute).
- Organisation of the INRA-CIRAD workshop on indicators of food and nutritional security, March 20-22 2018, La Grande Motte, France.
- Co-organisation of the International Conference on Global Crop Losses, with Christian Lannou, Serge Savary and Sylvie Colleu, INRA Paris, October 16-18 2017.
- COP 21 conference, organization of the scientific plenary session on “Climate and Food Security”, with Patrick Caron, Paris, November 2015
- COP 21 conference, organization of the parallel session “Adaptation of agriculture and pasture to climate change”, with Yildiz Thomas, July 2015
- INRA-LEI (WUR, Wageningen) Workshop, “New perspectives on food security”, 12 June 2015 (with Stephan Marette), Paris.
- Workshop on the analysis and evaluation of public policies, with Luc Behaghel, Sylvain Chabé-Ferret, Séverine Gojard, Catarina Goulao and Julian Mischi, January 21-23 2014.
- INRA scientific workshop on biofuels, with Florence Jacquet, March 16 2010, Paris.
- INRA scientific workshop on risks, with Olivier Allais, Laure Bonnaud, Alain Carpentier, Didier Torny and Nicolas Treich, January 24 2008, Paris.
- INRA scientific workshop on water and biodiversity, with Didier Aubert, September 18 2008, Paris.
- INRA Workshop on the econometrics of individual preferences, with Sébastien Lecocq and Michel Simioni, Dijon, March 20-22 2006.
- INRA workshop on production economics, November 28-29 2000, Paris.
- GREMAQ econometrics seminar (with Thierry Kamionka), University of Toulouse, 2000-2004.

### **Other research management activities**

- Referee for scientific journals: Agricultural Economics, American Journal of Agricultural Economics, Canadian Journal of Agricultural Economics, Econometrica, Econometrics Journal, The Economic Journal, Environmental and Resource Economics, European Review of Agricultural Economics, European Review of Operational Research, Journal of Agricultural Economics, Journal of Applied Econometrics, Journal of Econometrics, Resource and Energy Economics, Water Resources Research.
- Co-editor (economics) of the *Review of Agricultural, Food and Environmental Studies*, Springer Nature, Springer Verlag (<https://www.springer.com/journal/41130>), 2022-
- Nominated member of the MESAG (Multidisciplinary Expert Scientific Advisory Group) for supervision of the GEO-7 Global Environment Outlook, 2022-2026.
- Member of the Board of Directors, Footprint Data Foundation (<https://www.fodafo.org/index.html> ), 2021-2024.
- Head of publication for INRAE Sciences Sociales, INRAE, 2013-2021.
- Scientific coordination (with Stéphane Blanc, CNRS) of the interdisciplinary CNRS-INRA call for projects MutAlim (Mutations Alimentaires, budget 400 k€), 2018.
- Scientific committee ADEME Graine call for proposals (Bioeconomy), 2018-2020.
- Strategic Committee of the GIS RevAlim (environmental labelling, INRAE-ADEME), 2021-.
- European scientific committee, EraNet Biodiversa, 2013.
- Member of the Allenvi working group on Climate (GT5, chaired by Hervé Le Treut), 2010-2014.
- Scientific committee of the international conference on crop loss, October 2017, Paris.
- Scientific committee of ANR Défi 5 (sécurité alimentaire et défi démographique), 2016-2018.
- Scientific committee for official report on “Residential water and sanitation at what cost”, CGEDD n° 010151-01, IGA 16006-15010-01 (M.L. Simoni, F. Guerber, J.P. Nicol and P.A. Roche, coord.), February 2016.
- Project reviewer for ANSES, 2017 ; European Science Foundation, 2017-2023; I-site MUSE (Montpellier), 2018-2023 ; DGRI, Ministère de la Recherche, 2012-2023.