

2022 AARES Distinguished Fellow

Professor Thomas W. Hertel



Thomas Hertel is Distinguished Professor of Agricultural Economics at Purdue University, where his teaching and research focus on international trade, climate change, food and environmental security. Tom's contributions to the quantitative analysis of domestic and international policy issues have been recognised with numerous awards, and decision-makers throughout the world use his work as an input to the formulation of trade and environmental policies. Tom's research has emphasised the economy-wide analysis of farm and food policies in the context of Computable General Equilibrium (CGE) models. When he started his research program in the 1980's, this type of analysis had not been used in the US agricultural policy debate. Following a sabbatical at Melbourne University in 1990/91, where he was inspired by the policy-relevant CGE analysis undertaken in Australia, he spearheaded efforts to provide a common data base and modeling infrastructure for those working on global trade and environmental policy issues. The resulting 'GTAP' data base formed the foundation for many of the studies of multilateral trade reform under the WTO and Tom is the Founder and Executive Director of the Global Trade Analysis Project (GTAP), which now encompasses more than 26,000 researchers in 175+ countries around the world. The GTAP short course which he initiated in 1992 has been offered more than 30 times and has given rise to a suite of courses, nick-named 'GTAP-U' which has graduated more than 1,000 students. The GTAP Advisory Board, initiated with strong support from the Australian government, now comprises 34 national and international agencies and institutions undertaking economywide analysis of policy issues.

More recently, Tom has broadened his research portfolio to include climate change impacts and mitigation as well as linkages between trade and biodiversity. The long term, National Science Foundation -funded project, GLASSNET, Global to Local Analysis of System Sustainability, merges global economic analysis with fine-scale local analysis of food system sustainability challenges. Network members of GLASSNET include GTAP, as well as ten other networks encompassing agronomy, climate science, ecology, geography, hydrology and political science, among others.

Tom is an award-winning teacher who has also supervised 45 PhD dissertations, and taught several generations of students in agricultural and applied economics. His work has received recognition from AARES (outstanding journal article, 1991), as well as serving on the editorial board of the AJARE, and he has participated in a number of AARES conferences over the past three decades. Tom is a 2022 recipient of the Alexander von Humboldt Research Prize and is a Fellow, and a Past-President, of the Agricultural and Applied Economics Association (AAEA), Fellow of the American Academy for the Advancement of Science (AAAS), and Honorary Life Member of the International Association of Agricultural Economists. His awards from the AAEA include Outstanding Graduate Teacher, Publication of Enduring Quality, Distinguished Policy Contribution, Outstanding Journal Article and Quality of Communication. His research has also been recognised by the Ecological Society of America (Sustainability Science Award).