

CLARE ALLYSON NARROD

Joint Institute for Food Safety and Applied Nutrition
University of Maryland
College Park, MD 20742
Cnarrod@umd.edu

9820 Kensington Parkway
Kensington, MD 20895
(301) 962-0227
Cansam@aol.com

EDUCATION

American Association for the Advancement of Science Risk Fellowship	Washington DC
Office of Risk Assessment and Cost-Benefit Analysis, Office of the Chief Economist, USDA.	1999-2000
Epidemiology and Risk Assessment Division	1998-1999
Office of Public Health, Food Safety Inspection Service, USDA	
University of Pennsylvania	Philadelphia, PA
Ph.D., Energy Management and Environmental Policy	1997
M.S., International Development and Appropriate Technology	1991
Wheaton College	Norton, Mass
B.A. in Anthropology	1985

WORK EXPERIENCE

Joint Institute for Food Safety and Applied Nutrition (JIFSAN)	College Park, MD
University of Maryland	January 2012 – to present
Director of the Risk Analysis Program and Monitoring and Impact Evaluation Lead Role: Develop and expand the risk analysis training program. Work with public and private partners as well as stakeholders to develop metrics to monitor and evaluate the impact of food safety capacity building efforts.	
Markets, Trade and Institutions Division, International Food Policy Research Institute	Washington, DC
Senior Research Fellow, Food and Water Safety Program Lead 2007-2012 Senior Research Fellow; 2005- 2007 Research Fellow Role: Developed the Food and Water Safety Program; wrote proposals to support the program, led research projects aimed at 1) understanding the cost of compliance of increased food safety requirements and private standards on the poor, 2) evaluating the socio-economic implications of foodborne, plant, and animal disease, the cost-benefit and cost-effectiveness of various control measures, and 3) understanding institutional mechanisms that have been successful in improving smallholder’s market access.	August 2005- January 2012
Office of the Chief Economist, USDA	Washington, DC
Economist (GS-14) in the Office of Risk Assessment and Cost-Benefit Analysis, Office of the Chief Economist, USDA Washington, DC; Role: Reviewed risk assessments and cost-benefit/effectiveness analyses of proposed and final agriculture rules for Agency clearance; provided guidance to USDA Agencies to meet regulatory compliance regarding animal diseases, plant diseases and food safety concerns. Wrote briefings for the Chief Economist explaining rules and their impact to aid in Secretarial decision-making. On leave to FAO 2001-2003; Detailed to Office of Information and Regulatory Affairs, Office of Management and Budget June-August 2005.	Sept. 2000 – August 2005 (on leave of absence from April 2001 – May 2003)

Food and Agricultural Organization, United Nations

Natural Resource Economist in the Animal Production and Health Division

Rome, Italy
April 2001- May 2003

Role: Led projects between International Agencies and National Institutes that focused on the impact of the livestock industrialization process on smallholders and how external factors such as environmental, animal health, and food safety impacted the profitability of these producers.

Consultant on projects related to Livestock research and development funding at the Economic Research Service, USDA; Economic impacts of Sanitary and Phytosanitary Measures barriers at Inter-American Institute for Cooperation in Agriculture, Economic impacts of animal waste and public and private research and development activities at the World Bank and animal waste disposal practices at EPA.

1993-1999

PUBLICATIONS

2019 C. **Narro**d, X. Dao, M. Miller, C. Wychgram, “Public Private Partnerships in Food Safety International Capacity Building,” Chapter 14 in *Food Safety Economics-Incentives for a Safer Food Supply*, (T. Roberts ed.) Springer.

2019 G. Mahuku, H.Nzioki, C. Mutegi, F. Kanampiu, C. **Narro**d, and D. Makumbi, “Pre-harvest management is a critical practice for minimizing aflatoxin contamination of maize,” *Food Control*, Volume 96, 219-226.

2016 E. Lambertini, R. Buchanan, C. **Narro**d, R. Ford, R. Baker, A. Pradhan, “Quantitative Assessment of Human and Pet Exposure to Salmonella Associated with Dry Pet Foods,” *International Journal of Food Microbiology*, Volume 216, (January), pp 79-90.

2015 E. Lambertini, R. Buchanan, C. **Narro**d, A. Pradhan, “Transmission of Bacterial Zoonotic Pathogens between Pets and Humans: the Role of Pet Food, Critical Reviews,” *Food Science and Nutrition*, 56 (3), 364-418.

2015 H. de Groote, C. **Narro**d, S. Kimenju, C. Bett, R. Scott, M. Tiongco, and S. Gitonga, “Measuring Rural Consumers’ Willingness to Pay for Quality Labels Using Experimental Auctions: the Case of Aflatoxin-free Maize in Kenya,” *Agricultural Economics*, 47(1):33-45.

2015 J. Rushing, C. **Narro**d, M. Sudharshan, P. Chakravarty, J. Sproul, “Education and Training are Keys to Improving the Safety of Spice and Botanical Ingredients,” *Food Safety Magazine*. August/September.

2013 B. Avendaño C. **Narro**d, M. Tiongco, “The Role of Public–Private Partnerships on the Access of Smallholder Producers of Mexican Cantaloupe to Fresh Produce Export Markets,” Chapter 4 in *Improving Import Food Safety*, (W. Ellefson, L. Zach, and D. Sullivan eds.) John Wiley & Sons. pp. 65-85.

2012. C. **Narro**d, J Zinsstag, M. Tiongco, “A One Health Framework for Estimating the Economic Costs of Zoonotic Diseases on Society,” *EcoHealth*, 9 (2), 150-162.

2012 M. Tiongco, C. **Narro**d, M. Kobayashi, R. Scott, J. Omiti, “Understanding Knowledge, Attitude, Perceptions, and Practices for HPAI Risks and Management Options among Kenyan Poultry Producers,” in *Health and the Future of Animal Agriculture*, (D. Zilberman, J. Otte, D. Roland-Holst, and D. Pfeiffer eds.) Publisher Springer New York and The Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy. pp. 281-304.

2012 P. Trench, C. **Narro**d, D. Roy, and M. Tiongco, “Responding to Health Risks along the Value Chain,” Chapter 11 in *Reshaping Agriculture for Nutrition and Health*, (S. Fan and R. Pandya-Lorch eds.) IFPRI, Washington, DC. pp. 93-102.

2012 J. Riviere, T. Bollyky, C. Brown, M. Brumfield, R. Buchanan, J. Chen, J. Chen, M. Doyle, J. Henney, C. Morel, C. **Narro**d, A. Stergachis, L. Wagstrom, P Yadav, Ensuring Safe Foods and Medical Products Through Stronger Regulatory Systems Abroad. ed J. Riviere and G. Buckley, Committee on Strengthening Core Elements of Regulatory Systems in Developing Countries, Institute of Medicine, National Academy of Science. The National Academies Press, Washington DC.

2011 G. Gruère, **C. Narrod**, and L. Abbott, “Agricultural, Food, and Water Nanotechnologies for the Poor: Opportunities, Constraints, and Role of the Consultative Group on International Agricultural Research,” IFPRI Discussion Paper #01064.

2011 J. Okello, **C. Narrod**, D. Roy, “Export Standards, Market Institutions and Smallholder Farmer Exclusion from Fresh Export Vegetable High Value Chains: Experiences from Ethiopia, Kenya and Zambia,” *Journal of Agricultural Science*, vol 3 #4.

2011 **C. Narrod**, M. Tiongco, and R. Scott, “Current and Predicted Trends in Production, Consumption and Trade in Live Animals and their Products, Special Issue on ‘The Spread of Pathogens through International Trade.’” *Revue Scientifique et Technique - Office International des Epizooties* 30(1): 31-49.

2010 **C. Narrod**, C. Delgado, and M. Tiongco. 2010. “Socio-Economic Implications of the Livestock Industrialization Process: How will Smallholders Fare,” Chapter 14 in *Livestock in a Changing Landscape, Volume 1: Drivers, Consequences and Responses*, (H. Steinfeld, H. Mooney, F. Schneider, and L. Neville eds.) Island Press. Washington, DC. pp. 269-284.

2010 K. Rich and **C. Narrod**, “The Role of Public–Private Partnerships in Promoting Smallholder Access to Livestock Markets in Developing Countries Methodology and Case Studies,” IFPRI Discussion Paper 01001.

2009 P. BIRTHAL, A. Jha, M. Tiongco, and **C. Narrod**, “Farm-Level Impacts of Vertical Coordination of the Food Supply Chain: Evidence from Contract Farming of Milk in India,” *Indian Journal of Agricultural Economics*. Vol.64, No.3, July-September.

2009 **C. Narrod**, D. Roy, J. Okello, B. Avendaño, A. Thorat, “Public-Private Partnerships and Collective Action in High Value Fruit and Vegetable Supply Chains,” *Food Policy*, vol. 34(1), pp 8-15, February.

2009 J. Fonseca and **C. Narrod**, “Looking into the Future for Agriculture and AKST,” Food Safety section in Chapter 5 in *Agriculture at a Crossroads: Global Report*. M. Rosegrant, M. Fernandez, A. Sinha, J. Alder, H. Ahammad, C. de Fraiture. (B. McIntyre, H. Herren, J. Wakhungu and R. Watson eds.) International Assessment of Agricultural Knowledge, Science and Technology for Development. Island Press, Washington DC. pp. 307-376.

2009 M. Tiongco, **C. Narrod**, and K. Bidwell, “Risk Analysis Integrating Livelihood and Economic Impacts of Wastewater Irrigation on Health,” in *Wastewater Irrigation in Low Income Countries: From Health Risk Assessment to Risk Mitigation*, (P. Drechsel, C. Scott, L. Raschid, M. Redwood, and A. Bahri eds.) Earthscan, London. pp. 127-145.

2009 R. Mehta, **C. Narrod**, and M. Tiongco, “Determinants of the Scaling up of Commercial Poultry Production in India. Research and Information System for Developing Countries,” RIS Discussion Paper #146.

2008 **C. Narrod**, D. Roy, B. Avendaño, and J. Okello, “Impact of International Food Safety Standards on Smallholders: Evidence from Three Cases,” Chapter 17 in *The Transformation of Agrifood Systems: Globalization, Supply Chains, and Smallholder Farmers*, (E. McCullough, P. Pingali, and K. Stamoulis eds.) Earthscan Press, London. pp. 355-372.

2008 C. Delgado, **C. Narrod**, and M. Tiongco, “Determinants and Implications of the Growing Scale of Livestock Farms in Four Fast-Growing Developing Countries,” (with G. Camargo Barros, A. Catelo, A. Costales, R. Mehta, V. Naranong, N. Poapongsakorn, V. Sharma, and S. de Zen), Published as IFPRI Research Monograph/Book (formerly IFPRI Research Report) IFPRI Research Report # 157 (June).

2008 **C. Narrod**, C. Pray, and M. Tiongco, “Technology Transfer, Policies, and the Role of the Private Sector in the Global Poultry Revolution”, IFPRI Discussion Paper #841. Washington, DC.

2008 **C. Narrod**, M. Tiongco, A. Costales, “Global Poultry Sector Trends and External Drivers for Structural Change,” In Workshop proceedings of the International Conference entitled “Poultry in the 21st Century – Avian Influenza and Beyond” held in Bangkok, Thailand on November 5-7, 2007. ed. O. Thieme, and D. Pilling, FAO Animal Production and Health Proceedings, No. 9, Rome: Food and Agricultural Organization of the United Nations (FAO).

2008 P. BIRTHAL, A. Jha, M. Tiongco, and **C. Narrod**, “Improving Farm-to-Market Linkages through Contract Farming: A Case Study of Smallholder Dairying in India,” IFPRI Discussion Paper #814. Washington, DC.

- 2008 M. Catelo, **C. Narrod**, M. Tiongco, “Structural Changes in the Philippine Pig Industry and their Environmental Implications,” IFPRI Discussion Paper #781. Washington, DC.
- 2007 **C. Narrod**, D. Roy, J. Okello, B. Avendaño, K. Rich. "The Role of Public-Private Partnerships and Collective Action in Ensuring Smallholder Participation in High Value Fruit and Vegetable Supply Chains," Collective Action and Property Rights (CAPRI) working papers 70, International Food Policy Research Institute, Washington DC.
- 2007 J. Okello, **C. Narrod**, and D. Roy, “Food Safety Requirements in African Green Bean Exports and their Impact on Small Farmers.” IFPRI Discussion Paper DP #737, Washington DC.
- 2005 S. Malcolm, **C. Narrod**, T. Roberts, and M. Ollinger, “Evaluating the Economic Effectiveness of Pathogen Reduction Technologies in Cattle Slaughter Plants,” *Agribusiness: An International Journal*, 20 (1), pp. 109-124.
- 2004 E. Ebel, W. Schlosser, J. Kause, K. Orloski, T. Roberts, **C. Narrod**, S. Malcolm, M. Coleman, M. Powell, “Draft Risk Assessment of the Public Health Impact of *Escherichia coli* O157:H7 in Ground Beef,” *Journal of Food Protection* 67, 2004, pp 1824 –1828.
- 2004 C. Delgado, **C. Narrod**, and M. Tiongco, “Implications of the Scaling-Up of Livestock Production in a Group of Fast-Growing Developing Countries.” in *Livestock and Livelihoods: Challenges and Opportunities for Asia in the Emerging Market Environment* (V. Ahuja ed.) National Development Dairy Board and Food and Agriculture Organization Press, Anand, India and Rome, Italy. pp. 95-131.
- 2003 J. Glauber and **C. Narrod**, “A Rational Regulatory Policy: The Case of Karnal Bunt.” In *Exotic Pests & Diseases: Biology and Economics for Biosecurity*, (D. Sumner ed.) Iowa State University Press, Ames, Iowa, pp. 167-184.
- 2003 E. Ebel, W. Schlosser, K. Orloski, J. Kause, T. Roberts, **C. Narrod**, S. Malcolm, M. Coleman, and M. Powell, “A Risk Assessment of *Escherichia Coli* O157:H7 in Ground Beef.” In *Microbial Food Safety in Animal Agriculture: Current Topics*, (M. Torrence and R. Isaacson eds.) Iowa State University Press, Ames, Iowa. pp. 313-324.
- 2003 K. Wiebe, M. Soule, **C. Narrod**, and V. Breneman, “Resource Quality and Agricultural Productivity: A Multi-Country Comparison.” In *Land Quality, Agricultural Productivity and Food Security: Biophysical Processes and Economic Choices at Local, Global, and Regional Levels*, (K. Wiebe, ed.) Edward Elgar, Cheltenham, UK. pp. 147-165.
- 2002 **C. Narrod** and S. Malcolm, “International Policies to Control Plant and Animal Diseases.” In Theme on Inspection, Quarantine, and Quality Control (G. Frisvold and J. Hillman Chapter eds.) In *Public Regulation in Food and Agriculture: Goals, Constraints, Policies, Instruments, and Disputes In Encyclopedia of Life Support Systems (EOLSS)* (A. Azzam Encyclopedia ed.), Developed under the Auspices of the UNESCO, EOLSS Publishers, Oxford, UK.
- 2003 C. Delgado, **C. Narrod**, and M. Tiongco. “Implications of the Scaling-Up of Livestock Production in a Group of Fast-Growing Developing Countries.” In *Proceedings of the 9th World Conference on Animal Production*, Porto Alegre, Brazil.
- 2001 J. Glauber and **C. Narrod**, “A Rational Risk Policy for Regulating Plant Diseases and Pests.” AEI –Brookings Joint Center Paper Series on Regulatory Analysis 01-05. Washington, DC.
- 2001 D. Orden, **C. Narrod**, and J. Glauber, “Least-Trade-Restrictive SPS Policies.” In *The Economics of Quarantine and the SPS Agreement*, (K. Anderson, C. McRae and D. Wilson eds.) Centre for International Economic Studies and Agriculture, University of Adelaide, Adelaide, Australia. pp. 183-215.
- 2001 T. Roberts, **C. Narrod**, S. Malcolm, and M. Modarres, “An Interdisciplinary Approach to Developing a Probabilistic Risk Analysis Model.” In *Interdisciplinary Food Safety Research*, (N. Hooker and E. Murano eds.) CRC Press, Boca Raton, Florida. pp. 1-24.

2001 **C. Narrod** and C. Pray, “Technology Transfer, Policies, and the Global Livestock Revolution.” *Proceedings of the International Agricultural Trade Research Consortium Symposium on Trade in Livestock Products*, Auckland, New Zealand.

2000 **C. Narrod** and K. Fuglie, “Private-Sector Investment in Livestock Breeding.” *Agribusiness: An International Journal*, 16 (4), pp. 457-470.

2000 R. Whiting, P. Coleman, **C. Narrod**, M. Powell, T. Roberts, and W. Schlosser, “Risk Assessment in the Control of VTEC.” In *Verocytotoxigenic E. coli*, (G. Duffy and P. Garvey, eds.) Food and Nutrition Press, Trumbull, Connecticut, pp. 337-351.

2000 K. Fuglie, **C. Narrod**, and C. Neumeyer, “Public and Private Investment in Animal Research.” In *Public-Private Collaboration in Agricultural Research: New Institutional Arrangements and Economic Implications*, (K. Fuglie and D. Schimmelpfennig eds.) Iowa State University Press, Ames, Iowa, pp. 117-154.

1999 T. Roberts, S. Malcolm, and **C. Narrod**, “Probabilistic Risk Assessment and Slaughterhouse Practices: Modeling Contamination Process Control in Beef Destined for Hamburger.” In *Proceedings of the Probabilistic Safety Assessment Specialty Meetings*, Washington DC.

1997 **C. Narrod**, “Potential Impact of Sanitary and Phytosanitary Barriers on Trade for the Americas.” Inter-American Institute for Cooperation of Agriculture, Technical Work Series #106, Coronado, Costa Rica.

1995 **C. Narrod** and C. Pray, “Technology Transfer in the Poultry Industry: Factors Associated with Increased Production.” In *Animal Waste and the Land-Water Interface*, (K. Steele ed.) CRC Press, Boca Raton, Florida. pp. 523-532.

1994 A. Manale and **C. Narrod**, “Environmental Implication of Industry Structure in Dairy, Swine, and Poultry Industries.” In *Proceedings of the Great Plains Agricultural Council*, Denver, Colorado.

1994 **C. Narrod**, R. Reynells, and H. Wells, “Potential Options for Poultry Waste Utilization: A Focus on the Delmarva Peninsula.” In *Proceeding of Environmentally Sound Agriculture*, ASAE, St. Joseph, Michigan.

1994 A. Manale, **C. Narrod**, and E. Trachtenberg, “Opportunities Available to the Vertical Integrator or Food Processor to Achieve Water Quality Benefits in the Dairy and Poultry Industries.” In *Proceeding of Environmentally Sound Agriculture*, ASAE, St. Joseph, Michigan.

INVITED TALKS

2018 “International Food Safety Capacity Building Efforts in Meeting the Goals of FSMA”, at a conference of Global Challenges: Building Healthy Food Systems, University of Maryland, Maryland (October).

2018 “Food Safety and Capacity Building Efforts in Developing Countries,” Agriculture, Food Security and Human Health: How to Ethically and Sustainably Feed a Growing Population panel, at a Conference on Food and Agriculture: A Global Conversation at the Institute for Food and Agricultural Literacy, University of California, Davis, CA (March).

2017 “Increased Interest in the Use of Science Based Risk Analysis Tools to Inform Regulatory Decisions,” in session on Exporting Food Safety to the Global Supply Chain, Regulatory Affairs Professional Society (RAPs) Regulatory Convergence Meeting, Washington DC (September).

2017 “Risk Analysis for Regulatory Decisions and Program Evaluation,” for the National Academy of Sciences committee tasked at Reducing the Threat of Improvised Explosive Device Attacks by Restricting Access to Chemical Explosive Precursors, sponsored by the Department of Homeland Security, Washington, DC (February).

2014 “Aflatoxin Risk Reduction Measures for the Global Good Project on Aflatoxin Control,” briefing meeting for Intellectual Ventures a private technology investment fund of Bill Gates focusing on major issues in global health and development. <http://www.intellectualventures.com/globalgood/>, Seattle, Washington (December).

2014 “Monitoring and Impact Evaluation Work of JIFSAN’s GAPs Program,” Korean National Academy of Agricultural Science, Jeonju City, Korea (October).

2014 “Behavior Factors Affection Adoption of Aflatoxin Risk Reduction Measures,” meeting held by the Global Donor Platform for Rural Development, to inform donors of research needs surround aflatoxin and nutritional impact; <https://www.donorplatform.org/nutrition-and-agricultural-development/latest/1282-need-for-mapping-donors-work-on-aflatoxin-control-outcomes-of-berlin-expert-meeting>, Berlin, Germany (October).

2014 “Impact of the Livestock Industrialization Process on Smallholders,” at NRC Committee on Considerations for the Future of Animal Science Research. National Academy of Sciences, Washington, DC (May).

2013 “*Esherichia coli* O157:H7 Risk Analysis in Slaughterhouses,” at 2nd International Food Safety Conference (IFSAC2013) International Food Safety Conference Food Safety: Critical Dimension of Food Security in Emerging Economies; Kuala Lumpur, Malaysia (December).

2013 “JIFSAN’s Metrics Work Associated with Food Safety Capacity Building Efforts,” at the American Association Post-Conference Workshop: Economic Analysis and Food Safety: The Food Safety Modernization Act; Economic Research Service, Washington, DC (August)

2013 “Use if Risk Analysis in Regulatory Decision-making the Case of Karnal Bunt,” 14th Fera/JIFSAN Annual Symposium Analytical Methods and Laboratory Practices for International Field Safety" FDA Wiley Building, College Park, Maryland (June).

2013 “JIFSAN’s Training and Metrics Program,” Agricultural and Natural Resource’s Convocation, University of Maryland, College Park, MD (June).

2013 “Does Knowledge of a Risk Change Behavior? Case of Aflatoxin in Kenya,” JIFSAN’s Advisory Council Spring Symposium Conundrum of Defining Food Safety – The Case of the Moving Zero, Greenbelt, Maryland (April).

2013 “Voices from the Field (Kenya and Mali): Findings from the AFLAControl Program” at USAID Mycotoxins: Triple Threat to African Development meeting, Woodrow Wilson International Center for Scholars, Washington, DC (February).

2012 “Lessons Learned from the Aflacontrol Project,” for session on Delivery and Translation of Knowledge for Reducing Mycotoxins in Developing Countries” MycoRed Project, Ottawa, Canada (June).

2012 “Highlights from Aflacontrol Project: Aflatoxin Prevalence Levels and Household Knowledge, Attitudes, and Perceptions,” for meeting on Aflatoxin: Impact on Stunting in Children and Interventions to Reduce Exposure Co-organized by International Food Policy Research Institute and the Enteric and Diarrheal Diseases, Agriculture and Nutrition teams at the Bill & Melinda Gates Foundation Washington, DC (February).

2012 Public Briefing of the IOM Report on “*Ensuring Safe Foods and Medical Products Through Stronger Regulatory Systems Abroad*,” National Press Club, Washington, DC (April).

2011 “Responding to Health Risks Along the Value Chain. 2020 Vision Initiative,” 2020 Conference on Leveraging Agriculture for Improving Nutrition and Health, New Delhi, India (February).

2011 “Evaluation of Cost Effective Aflatoxin Risk Reduction Measures,” MycoRed Conference, Capetown, South Africa (April).

2010 “Exploring the Scope of Cost-Effective Aflatoxin Risk Reduction Strategies in Maize and Groundnut Value Chains so as to Improve Market Access and Health of the Poor in Africa,” Bill and Melinda Gates Foundation, Convening on Aflatoxin USDA, Washington DC (January).

2010 “Global Trade of Inputs, Poultry and Poultry Products and its Effect on the Development of Poultry Production in Developing Countries.” Joint FAO-WPSA Symposium on Guidance of the Poultry Sector - Issues and Options, Tours, France (August).

2010 “Agriculture, Food, and Water Nanotechnologies for the Poor: Opportunities, Constraints, and Role of the CGIAR,” International Conference on Food and Agriculture Applications of Nanotechnologies Brazil Nano-Tech Conference, Sao Carlos, Brazil (June).

2010 “A One Health Framework for Estimating the Economic Costs of Zoonotic Diseases on Society,” World Bank Vietnam Learning Exchange, Hanoi, Vietnam (April).

2010 “Exploring the Scope of Cost-Effective Aflatoxin Risk Reduction Strategies in Maize and Groundnut Value Chains so as to Improve Market Access and Health of the Poor in Africa,” Bill and Melinda Gates Foundation, Convening on Aflatoxin, Seattle, Washington (March).

2009 “Socio-economic Impacts of HPAI Findings from the DFID-Funded Collaborative HPAI Research Project in Africa and Asia,” Pan African Technical Workshop on Avian and Human Influenza, African Union Inter-African Bureau for Animal Resources, Addis, Ethiopia (August).

2009 “Integrating Economics with Risk Assessment to Inform SPS decisions,” Standard and Trade Development Facility Workshop "Using Economic Analysis to Inform SPS Decision Making," World Trade Organization (October).

2008 "Risky Business of Policymaking" at an Agriculture and Rural Development and Governance co-sponsored luncheon on "Risky Business: Governing for Food Safety, Agricultural Health, and Environmental Protection" at the World Bank. Washington, DC (February).

2006 “Need for Evaluating the Spatial Spread of HPAI and Identifying Cost-Effective Control Measures taking into Account the Impact on the Poor,” Annual General Meeting of the CGIAR Council, Washington, (December).

2006 “Socio-Economic Implications of the Livestock Industrialization Process: How will Smallholders Fare?” FAO Conference on Livestock in a Changing Landscape, Bangkok, (December).

2006 “Overview of Types of Losses Compensated and Rates Applied, Their Rationale, and Good Practice,” Office International des Epizooties Meeting on HPAI Compensation, Paris, (October).

2006 “Avian Influenza in East and West Africa: Modeling the Spatial Spread, Evaluating the Cost-Effectiveness of Alternative Control Strategies, and Assessing the Impact on the Poor,” Department for International Development, (DFID) London, UK (July).

2004 “Risky Business of Policy Making: An Experiment of Combining Risk Assessment and Cost-Benefit Analysis.” Symposium on Modeling and Risk Assessment: Combating the Uncertainty of Policy Decisions, American Association for the Advancement of Science Annual Meeting, Seattle, Washington (February).

2003 “Implications of the Scaling-Up of Livestock Production,” at Plenary Session on the Impact of Livestock on the Environment. 9th World Conference on Animal Production, Porto Alegre, Brazil (October).

2003 “Economics of Foodborne Pathogens: Case Study of Beef Slaughterhouses.” Encontro Internacional dos Negocios da Pecuária, Cuiabá, Mato Grossa, Brazil (March).

2002 “The Livestock Revolution,” Symposium: Production et Alimentation, Berne, Switzerland, (March).

2002 “Trade Implications of Animal Health and Food Safety,” Internationale Grüne Woche: Ausstellung für Ernährungswirtschaft, Landwirtschaft und Gartenbau, Berlin, Germany, (January).

2001 “Global Trade in Livestock, Livestock Products and By-products.” Joint WHO/FAO/OIE/ Technical Consultation on BSE: Public Health, Animal Health and Trade, Paris, France (June).

2001 “Livestock Research: The Division of Labor between the Public and Private Sector,” Invited Presentation to the Pig Improvement Company, North Carolina (March).

2001 “The Livestock Revolution and Food Safety,” Symposium on The Livestock Revolution – Implications for Human Nutrition, Resource Use and Environment, at the American Association for the Advancement of Science Annual Meeting, San Francisco, California (February).

2001 "Technology, Policies, and the Role of the Private Sector in the Global Poultry Revolution," International Trade in Livestock Products Symposium, Auckland, New Zealand 14567, International Agricultural Trade Research Consortium (January).

2000 “Implications for Food Safety in Developed and Developing Countries,” World’s Fair EXPO 2000 on Sustainable Animal Production and World Food Supply to 2020, Hanover, Germany, (August).

2000 “Economics of Food borne Pathogens: Case Study of Beef Slaughterhouses,” Symposium on Risky Microbes. at the American Association for the Advancement of Science Annual Meeting, Washington DC (February).

REFEREED MEETING PRESENTATIONS

2019 C, Narrod, X. Dou, M. Miller, T. Chfadi, D. Pahl, J. Beaulieu, “Evaluating the Effectiveness of Basic Good Agricultural Practices Training by University of Maryland Extension,” Agricultural and Applied Economics Annual Meetings, Atlanta, Georgia (July).

2019 C. Narrod and X. Dou, “JIFSAN’s Training and Monitoring and Evaluation Program: Case Study of GAP’s Training in Latin America,” Society for Benefit Cost Analysis, Washington DC (March)

2018 C. Narrod C. Wychgram, W Zhao, “Evaluation of HACCP Capacity Building in the Caribbean.” In selected session *Targeting and Evaluating Investments in Food Safety in Low- and Middle- Income Countries*, Agricultural and Applied Economics Annual Meetings, Washington DC (August).

2017 C. Narrod, X. Dou, M. Miller, T. Chfadi, D. Pahl, and J. Beaulieu, “Measuring the Effectiveness of Good Agricultural Practices Training Through Maryland Extension Programs on Maryland Farmers,” Northeastern Agricultural and Resource Economics Association Annual Meeting, Arlington, VA (June).

2017 J. Beaulieu, D. Pahl, T. Chfadi, C. Narrod, C. Walsh, D. Martin, S. Micallef, “Determining Factors that Encourage Grower Adoption and Implementation of Good Agricultural Practices,” Advancing Food Safety through Behavior Change hosted by Partnership for Food Safety Education, Washington, DC, Poster Session (January).

2016 C. Narrod and M. Miller, “Economic Incentives for Capacity Building in Food Safety,” in session on Information and the Creation of Positive Economic Incentives for Food Safety Performance,” International Association for Food Protection Annual Meeting, St Louis, Missouri (August).

2016 C. Narrod, M. Miller, & T. Chfadi, "Effectiveness of International Food Safety Train-The Trainer Programs in Good Agricultural and Aqua cultural Practices: Evidence from Survey Instruments," Agricultural and Applied Economics Association, Boston, Massachusetts, Poster Session (August).

2015 C. Narrod, M. Miller, T. Chfadi, “Building Capacity to Assure Food Safety in Low Income Countries: Progress Report on JIFSAN’s Training Initiatives,” in session on Food Safety as a Global Public Good: Recent Advances in Strengthening the Foundation for More Effective Food Safety Management Around the World, at the AAEE & WAEA Joint Annual Meeting Program, San Francisco, Ca (July).

2015 E. Lambertini, R. Buchanan, C. Narrod, A. Pradhan, “Frontiers in Quantitative Microbial Exposure and Risk Assessment for Salmonella Control: Applications to Managing Risk in the Dry Pet Food Production Chain,” Society for Risk, Analysis Annual Meetings, Arlington, VA (December).

- 2015 D. Pahl, T. Chfadi, C. Narrod, C. Walsh, D. Martin, S. Micallef, "Evaluating the Effectiveness of Food Safety Trainings by Determining Factors that Influence Grower Adoption of Food Safety Certification Practices," International Association for Food Protection, Portland, Oregon, Poster Session (July).
- 2015 E. Lambertini, R. Buchanan, C. Narrod, A. Pradhan, "Modeling Foodborne Pathogen Transfer and Exposure in the Household Environment," International Association for Food Protection, Portland, Oregon, Poster Session (July).
- 2015 L. Matumba, C. Van Poucke, M. Sulyok, Clare Narrod, Sarah De Saeger, "Is the Narrow Focus on Aflatoxins in Sub-Saharan Africa Plausible?" 37th Mycotoxin Workshop, Society for Mycotoxin Research, Bratislava, Slovakia, Poster Session (June).
- 2015 C. Narrod, "Ethical Issues for Food Safety in the Context of Global Food Security," prepared for project Feeding the World, Ethically, The Johns Hopkins Berman Institute of Bioethics, as part of an edited volume coming out of the project. Abstracts at <http://www.bioethicsinstitute.org/wp-content/uploads/2015/05/CPA.pdf>
- 2011 H. De Groote, C. Narrod, C. Bett, R. Scott, M. Tiongco. "Measuring Rural Consumers' Willingness to Pay for Quality Labels Using Experimental Auctions: the Case of Aflatoxin Free Maize in Kenya." European Association of Agricultural Economists, Switzerland, Poster Session (August).
- 2011 M. Tiongco, C. Narrod, M. Kobayashi, R. Scott, and N. Nuryartono, "Understanding Knowledge, Attitude, Perceptions, and Practices for HPAI Risks and Management Options amongst Small Scale Poultry Producers in Indonesia." 7 th ASAE International Conference, Meeting the Challenges Facing Asian Agriculture and Agricultural Economics toward a Sustainable Future, Hanoi, Vietnam (October).
- 2011 C. Narrod, M. Tiongco, M. Kobayashi, R. Scott, and W. Collier. "Understanding Knowledge, Attitude, Perceptions, and Practices for Avian Influenza Risk and Management Options amongst African Poultry Producers." Paper prepared for the AAEE Annual Meeting.
- 2009 C. Narrod. "Exploring the Scope of Cost-Effective Aflatoxin Risk Reduction Strategies in Maize and Groundnut Value Chains so as to Improve Market Access of the Poor in Africa." Advances in Arachis through Genomics & Biotechnology, West and Central Africa Regional Peanut Workshop, Bamako, Mali (October).
- 2009 J. Okello, C. Narrod, D. Roy, "Why Market Institutions Disfavor Smallholder Farmers' Compliance with International Food Safety Standards: Evidence from Kenya, Zambia and Ethiopia," International Association of Agricultural Economists Annual Meetings, Beijing, China (August).
- 2009 F. Unger, J. Mariner, C. Narrod, I. Syafrison, A. Sudarman, B. Arifin, B., N. Nuryartono, B. Sumiarto and E. Siregar, "Pro-poor Risk Reduction Strategy for HPAI Control in Backyard Poultry in Indonesia: a Project Overview and Approaches used." Tropentag 2009, Hamburg, Germany, Poster Session (October).
- 2009 C. Lagerkvist, H. Johansson, E. Birol, D. Roy, and C. Narrod, "A Supply-Chain Analysis of Food Safety Standards Related to the Use of Wastewater for Irrigation of Crops," International European Forum, Innsbruck-Igls, Austria International European Forum on System Dynamics and Innovation in Food Networks. (February).
- 2008 J. Okello, C. Narrod, and D. Roy, "Institutional Innovations for Smallholder Compliance with International Food Safety Standards: Experiences from Kenya, Ethiopian and Zambian Green Bean Growers," 2007 Second International Conference, African Association of Agricultural Economists Accra, Ghana (August).
- 2008 C. Narrod, M. Tiongco, and A. Costales, "Global Poultry Sector Trends and External Drivers for Structural Change." FAO proceedings on "Poultry in the 21st Century," FAO. Rome.
- 2007 H. Okusu, C. Narrod, and D. Roy, "Food Safety in the CGIAR IFPRI-CGIAR Science Council Roundtable on Food Safety Report and Recommendations arising from a joint IFPRI Science Council sponsored Roundtable on possible Approaches to Food Safety Research in the CGIAR, Rome. Italy.

2006 C. Narrod, D. Roy, K. Rich, J. Okello, B. Avendano and A. Thorat, "Role of Public-Private Partnerships and Collective Action in Ensuring Smallholder Participation in High Value Fruit and Vegetable Supply Chains," Collection Action and Property Rights (CAPRI) Research Workshop on Collective Action and Market Access for Smallholders, Cali, Colombia (October).

2006 C. Delgado, P. McKenzie, C. de Haan, A. McLeod, A. Riviere-Cinnamond, and C. Narrod, "Enhancing Control of Highly Pathogenic Avian Influenza in Developing Countries through Compensation: Issues and Good Practice." World Bank, Agriculture and Rural Development.
<http://documents.worldbank.org/curated/en/495441468316148345/pdf/384040HPAI1Compensation01PUBLIC1.pdf>

2004 C. Narrod, "A Framework for Combining Risk Analysis With Cost-Benefit and Environmental Analysis to Improve Regulatory Analysis," Society for Risk Analysis Annual Meeting, Palm Springs, CA (December).

2003 C. Narrod, "Location and Farm Size: Comparison of the Broiler and Swine Industries in Brazil, Thailand, and the Philippines," International Association for Agricultural Economists Annual Meetings, Durban, South Africa (August).

2003 C. Narrod, "Demand and Supply Factors Behind the Livestock Revolution," American Agricultural Economic Associations Annual Meetings, Montreal, Canada (July).

2001 C. Narrod and J. Glauber, "A Rational Policy for Regulating Plant Diseases," Australian Agricultural and Resource Economics Annual Meetings, Adelaide, Australia (January).

2001 C. Narrod and J. Glauber, "Bunting Through the Policy Making Process," Society for Risk Assessment Annual Meetings, Crystal City, Virginia (December).

2000 C. Narrod, "Economics of Food borne Pathogens: Case Study of Beef Slaughterhouses," Symposium on Risky Microbes. American Association for the Advancement of Science Annual Meeting, Washington DC (February).

2000 C. Narrod and C. Pray, "Technology, Policies, and the Global Poultry Revolution," 24th International Conference of Agricultural Economists Annual Meeting, Berlin, Germany (August).

2000 S. Malcolm, C. Narrod, T. Roberts, and M. Ollinger, "Evaluating the Economic Effectiveness of Pathogen Reduction Technology in Beef Slaughter Plants." Selected paper for the 24th International Conference of Agricultural Economists, Berlin, Germany (August).

2000 C. Narrod, S. Malcolm, and W. Kost, "The Significance of Interceptions of Fresh Produce From Latin America and the Caribbean into the United States," American Agricultural Economics Association Meeting (New Name 2008: Agricultural and Applied Economics Association), Tampa, FL (August).

2000 K. Wiebe, M. Soule, C. Narrod, and V. Breneman, "Resource Quality and Agricultural Productivity: A Multi-Country Comparison," American Agricultural Economics Association Meeting (New Name 2008: Agricultural and Applied Economics Association). Tampa, FL (August).

2000 J. Glauber and C Narrod, "The Theory and Methodology behind Linking Risk Assessments and Cost-Benefit Analysis." Western Agricultural Economists Meetings, Vancouver, Canada (July).\

1999 C. Narrod, S. Malcolm, M. Ollinger, and T. Roberts, "Pathogen Reduction Options in Slaughterhouses and Methods for Evaluating Their Economic Effectiveness," American Agricultural Economics Association (New Name 2008: Agricultural and Applied Economics Association), Nashville, TN (August).

1999 C. Narrod, "Slaughter Simulation Model," as part of the USDA Risk Assessment of E. coli O157:H7 in Ground Beef. International Association for Milk, Food, and Environmental Sanitarians, Dearborn, Michigan (August).

1999 T. Roberts, S. Malcolm, and C. Narrod, “Probabilistic Risk Assessment and Slaughterhouse Practices: Modeling Contamination Process Control in Beef Destined for Hamburger.” Probabilistic Safety Assessment Specialty Meetings, Washington DC (August).

Reports and Non-Refereed Monographs

2018 C. Narrod, X. Dou, and C. Wychgram, “Lessons Learned from JIFSAN’s Collaborative Training Centers Experience Promoting Country Driven Food Safety Capacity Building in Bangladesh and India,” Report prepared for World Bank study on making the Case for Food Safety Investment in Developing Countries. (January).

2018 C. Narrod X. Dou, and C. Wychgram, “Impact of ILSI Fellowship Program with JIFSAN in Building Risk Analysis Capacity at CSFA,” Report prepared for World Bank study on making the Case for Food Safety Investment in Developing Countries. (January).

2018 C. Narrod and C. Wychgram, “Monitoring and Evaluation of Preliminary Findings from HACCP Capacity Building Efforts in the Caribbean,” Report prepared for a World Bank study on making the Case for Food Safety Investment in Developing Countries. (January).

2018 C. Narrod, X. Dou, and C. Wychgram, “JIFSAN’s International GAP Training Program and Preliminary Findings from the Monitoring and Evaluation Program,” Report prepared for World Bank study on making the Case for Food Safety Investment in Developing Countries. (January).

2016 F. Sampedro, C. Narrod, M. Sanchez-Plata, R. Flores, B. Wang, A Cordero, H Silva, M Caipo, and E. Perez, “Building a Strategic Alliance for Sustainable Food Safety Risk Analysis Capacity Building in the Americas,” Paper prepared for PAHO and presented to the Ministers at the Inter-American Ministerial Meeting on Health and Agriculture (RIMSA 17) Asuncion, Paraguay, (July).

2012 C. Narrod, M. Tiongco, H de Groote, G Mahuku, “Kenya the Aflacontrol Project: Reducing the Spread of Aflatoxins in Kenya: Summary Report. Findings of the Aflcontrol Project,” Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 C. Narrod, M. Tiongco F Waliyar, J Ndjeunga, “Mali the Aflacontrol Project: Reducing the Spread of Aflatoxins in Mali: Summary Report. Findings of the Aflcontrol Project,” Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 M. Tiongco, H. De Groote, J. Ndjeunga, C. Narrod, R. Scott, “Willingness to Pay for Certified Aflatoxin-free Groundnuts in Mali,” Aflacontrol Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 H. De Groote, C. Narrod, C. Bett, R. Scott, M. Tiongco, “Measuring Rural Consumers’ Willingness to Pay for Quality Labels Using Experimental Auctions: the Case of Aflatoxin Free Maize in Kenya.” Aflacontrol Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 M. Tiongco, C. Narrod, H. De Groote, J. Ndjeunga, “Assessing the Impact of Aflatoxin Contamination on Poor Households’ Income and Wealth in Kenya and Mali.” Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 F. Wu, C. Narrod, M. Tiongco, Y. Liu, W. Collier, and R Scott, “The Economic Impact of Health Consequences of Aflatoxin: Estimation of the Global Burden of Disease,” Aflacontrol Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 C. Bett, H De Groote, and C. Narrod, “Economic Importance of Different Maize Storage Structures in Kenya,” Aflacontrol Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 C. Narrod, F. Wu, M. Tiongco, G. Mahuku, H. de Groote, C. Bett, S. Nzuku, “Evaluation of Risk Management Options to Reduce Aflatoxin in Maize Produced by Rural Farmers in Kenya.” Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 C. Narrod, F. Wu, M. Tiongco, F. Waliyar, J. Ndeunga, B. Lamissa, “Evaluation of Risk Management Options to Reduce Aflatoxin in Groundnuts Produced by Rural Farmers in Mali.” Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 C. Narrod, M. Tiongco, H. de Groote, W. Collier, C. Bett, J. Hellin, “Do Knowledge, Attitude, and Perceptions about Aflatoxin Effect Producer Action: A Case Study of Kenyan Maize Producers?” Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 C. Narrod, M. Tiongco, J. Ndjeunga, R. Scott, and W. Collier, “Understanding Knowledge, Attitude, Perceptions, and Practices for Aflatoxin Risk and Management Options amongst Malian Groundnut Producers.” Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

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2012 J. Ndjeunga, C. Narrod, M. Tiongco, Bamory, O. Kodio, F. Waliyar, A. Traore, “Household Rural Livelihoods and Groundnut Value Chain Analysis in Mali: A Qualitative Report.” Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 M. Tiongco, C. Narrod, H. De Groote, J. Ndjeunga. “Assessing the Impact of Aflatoxin Contamination on Poor Households’ Income and Wealth in Kenya and Mali. Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2012 M. Tiongco, C. Narrod, and W. Collier, J. Ndjeunga, and H. De Groote. “Gender Differences in Knowledge, Attitude, Perceptions, and Practices about Aflatoxin and Risk Management Decisions among Poor Households in Kenya and Mali.” Project Paper submitted to the Bill and Melinda Gates Foundation, International Food Policy Research Institute, Washington DC.

2011 C. Narrod, J. Zinsstag, M. Tiongco, “A One Health Framework for Estimating the Economic Costs of Zoonotic Diseases on Society,” Paper submitted to the World Bank. IFPRI, Washington, DC.

2011 C. Narrod, M. Tiongco, M. Kobayashi, R. Scott, A. Saak, and G. Ayele, “Evaluating Risk Management Options to Reduce the Risk of HPAI for Ethiopia’s Poor Poultry Producers.” HPAI Pro-Poor Project report submitted to the UK’s Department for International Development, IFPRI, Washington, DC.

2011 C. Narrod, M. Tiongco, M. Kobayashi, R. Scott, A. Saak, and A. Mensah-Bonsu. “Evaluating Risk Management Options to Reduce the Risk of HPAI for Ghana’s Poor Poultry Producers.” HPAI Pro-Poor Project report submitted to the UK’s Department for International Development, IFPRI, Washington, DC.

2011 C. Narrod, M. Tiongco, M. Kobayashi, R. Scott, A. Saak, and J. Omiti, “Evaluating Risk Management Options to Reduce the Risk of HPAI for Kenya’s Poor Poultry Producers.” HPAI Pro-Poor Project report submitted to the UK’s Department for International Development, IFPRI, Washington, DC.

2011 C. Narrod, M. Tiongco, M. Kobayashi, R. Scott, A. Saak, and N. Nuryartono, “Evaluating Risk Management Options to Reduce the Risk of HPAI for Indonesia’s Poor Poultry Producers.” HPAI Pro-Poor Project report submitted to the UK’s Department for International Development, IFPRI, Washington, DC.

2011 C. Narrod, M. Tiongco, M. Kobayashi, R. Scott, B. Okpukpara, “Evaluating Risk Management Options to Reduce the Risk of HPAI for Nigeria’s Poor Producers,” HPAI Pro-Poor Project report submitted to the UK’s Department for International Development, IFPRI, Washington, DC.

- 2010 G. Gruère, C. Narrod, and L. Abbott, “Agricultural, Food, and Water Nanotechnologies for the Poor: Opportunities, Constraints, and Role of the Consultative Group on International Agricultural Research,” Commissioned by FAO. IFPRI, Washington, DC.
- 2010 C. Narrod and J. Otte, “Findings from Final Workshop on Pro-poor HPAI Risk Reduction: Lessons from Southeast Asia and Africa,” Phuket, Thailand (October). Research Meeting Pro-poor HPAI Risk Reduction: Lessons from Southeast Asia and Africa Held in conjunction with the 34th Session of the Animal Production and Health Commissions for Asia and the Pacific (APHCA) Phuket, Thailand. Pro-Poor Project report submitted to the UK’s Department for International Development, IFPRI, Washington, DC.
- 2009 E. Schiffer, C. Narrod, K. von Grebmer, “Surveillance and Control of Highly Pathogenic Avian Influenza in Ghana,” HPAI Pro-Poor Project report submitted to the UK’s Department for International Development, IFPRI, Washington, DC.
- 2009 E. Schiffer, C. Narrod, K. von Grebmer, “Surveillance and Control of Highly Pathogenic Avian Influenza in Nigeria,” HPAI Pro-Poor Project report submitted to the UK’s Department for International Development, IFPRI, Washington, DC.
- 2009 M. Tiongco, C. Narrod, M. Kobayashi, R. Scott, and W. Collier, “Willingness to Pay/Accept for HPAI Biosecurity Measures Amongst African Producers,” HPAI Pro-Poor Project report submitted to the UK’s Department for International Development, IFPRI, Washington, DC.
- 2009 R. Mehta, C. Narrod, and M. Tiongco, “Determinants and Implication of the Scaling up of Commercial Broiler and Egg Production in India.” International Food Policy Research Institute. Project Report submitted to FAO, IFPRI, Washington, DC.
- 2009 B. Avendano, B., C. Narrod, and M. Tiongco, “Food Safety Requirements in Cantaloupe Exports from Mexico and their Impact on Small Farmers’ Competitiveness,” International Food Policy Research Institute. Project Report submitted to IFPRI, Washington, DC.
- 2008 J. Okello, C. Narrod, and D. Roy, “Smallholder Compliance with International Food Safety Standards is not a Fantasy,” Fresh Perspectives #15, International Institute for Environment and Development. London, UK.
- 2008 L. Sims and C. Narrod, “Understand Avian Flu,” Paper prepared for FAO Animal Health and Production Unit. IFPRI, Washington, DC.
- 2007 C. Narrod, J. Otte, D. Pfeiffer, “Using Risk Analysis to Capture the Spatial Spread of Avian Influenza, Evaluating the Cost-Effectiveness of Alternative Control Strategies, and Assessing the Impact on the Poor,” *EnviroInfo* (Warschau) Environmental Informatics and Systems Research Copyright © Shaker Verlag, Aachen 2007. ISBN: 978-3-8322-6397-3
- 2007 C. Narrod, D. Roy, A. Gulati, N. Minot, C. Delgado, "IFPRI Concept Note on Food Safety Research Priorities for the CGIAR System." For IFPRI-CGIAR Science Council Expert Roundtable on Food Safety. Washington, DC May 8-9).
- 2006 J. Okello, C. Narrod, D. Roy, “Food Safety Requirements in African Green Bean Exports and Their Impact on Small Farmers,” Project Report submitted to IFPRI, Washington, DC.
2006. C. de Haan, D Husnik, C. Narrod, L Hagedoorn, L. Ignacioa “Vietnam Food Safety and Agricultural Health Action Plan,” World Bank, Report No. 35231 VN.
- 2006 M. Tiongco, C. Narrod, and C. Delgado. “Equitable Intensification of Market-Oriented Smallholder Dairy and Poultry Production in India through Contract Farming: A Synthesis. Research Report submitted to FAO.
- 2006 P. BIRTHAL, K. Awadhash, M. Tiongco, C. Delgado, C. Narrod, and P.K.Joshi, “Equitable Intensification of Market-Oriented Smallholder Dairy Production in India through Contract Farming, “ Final Research Report of Phase II Project on Livestock Industrialization, Trade and Social-Health-Environment Impacts in Developing Countries Research Report Submitted to the Food and Agricultural Organization and the EU.

2006 M. Fairoze, L. Achoth, P. Rashmi, M. Tiongo, C. Delgado, C. Narrod, and P. Chengappa), Equitable Intensification of Market-Oriented Smallholder Poultry Production in India through Contract Farming, Research Report of Phase II Project on Livestock Industrialization, Trade and Social-Health-Environment Impacts in Developing Countries Submitted to the Food and Agricultural Organization and the EU.

2003 C. Delgado, C. Narrod, and M. Tiongo. "Policy, Technical, and Environmental Determinants and Implications of the Scaling-Up of Livestock Production in Four Fast-Growing Developing Countries: A Synthesis." Research Report of Phase II Project on Livestock Industrialization, Trade and Social-Health-Environment Impacts in Developing Countries Submitted to the Food and Agricultural Organization and the EU.

2003 N. Poapongsakorn, V. NaRanong, C. Delgado, C. Narrod, P. Siriprapanukul, N. Srianant, P. Goolchai, S. Ruangchan, S. Methrsurarak, T. Jittreekhun, N. Chalermphao, and B. Suwankiri, M. Tiongo Policy, Technical and Environmental Determinants and Implications of the Scaling-up of Swine, Broiler, Layer, and Milk Production in Thailand, Research Report of Phase II Project on Livestock Industrialization, Trade and Social-Health-Environment Impacts in Developing Countries Submitted to the Food and Agricultural Organization and the EU.

2003 G. Camargo Barros, S. de Zen, M. Piedade Bacchi, S. 2003 Galvão de Miranda, C. Narrod, and M. Tiongo. "Policy, Technical, and Environmental Determinants and Implications of the Scaling-Up of Swine, Broiler, Layer and Milk Production in Brazil." Research Report of Phase II Project on Livestock Industrialization, Trade and Social-Health-Environment Impacts in Developing Countries Submitted to the Food and Agricultural Organization and the EU.

2002 C. Delgado and C. Narrod. "Impact of the Changing Market Forces and Policies on Structural Change in the Livestock Industries of Selected Fast-Growing Developing Countries." Research Report of Phase I submitted to the Food and Agriculture Organization and DFID.

2001 M. Powell, P. Coleman, E. Ebel, S. Malcolm, C. Narrod, T. Roberts, W. Schlosser "Risk Assessment of E. coli O157:H7 in Ground Beef," Analysis and documentation prepared for FSIS, USDA.

2000 C. Narrod, L. Unnevehr and C. Pray. "Food Safety Research: What is the Division of Public and Private Effort?" Unpublished Working paper, (April).

1999 C. Narrod, S. Malcolm, M. Ollinger, and T. Roberts. "Pathogen Reduction Options In Slaughterhouses and Methods for Evaluating Their Effectiveness." Selected paper for the American Association of Agricultural Economics Meetings, Nashville, Tennessee, (August).

1999 N. Hirschorn, L. Unnevehr, and C. Narrod "Animal and Plant Health and Food Safety: An Issue Paper Concerning Future World Bank Involvement." Research report prepared for the Rural Policy Division for Rural Week, World Bank.

1999 C. Narrod and K. Fuglie. "Factors Effecting Private Sector Involvement in Livestock Research." Selected paper presented at the NC-208 conference on Research Spillovers and Collaboration, Tucson, Arizona, (February).

1997 C. Narrod "Potential Impact of Sanitary and Phytosanitary Barriers on Trade for the Americas." White Paper prepared for Inter-American Institute for Cooperation of Agriculture.

1994 D. Umali-Deininger, C. Narrod, and K. Deininger. "Private Sector Development In Agriculture: Constraints, Opportunities, and New Approaches." Paper prepared for the Private Sector Development Department, World Bank.

1993 C. Narrod, R. Reynnells, H. Wells "Potential Options for Poultry Waste Utilization: A Focus on the Delmarva Peninsula." White paper prepared for EPA/USDA.

FUNDRAISING

Research

World Bank grant

- 2017-2018 – PI - \$8,925- Provide four case studies on JIFSAN's monitoring and evaluation work in support of World Bank study on making the Case for Food Safety Investment in Developing Countries.

- 2009-2010 –Co-PI- \$24,000 K - Grant to develop framework for implementing a One Health Approach to analyzing zoonotic diseases for the World Bank’s Central Asia Operations program– With Swiss Tropical Institute.
- 2006 – \$27,000 – Co-PI, World Bank Study on Best practices associated with HPAI Compensation.

Grocery Manufacturers Association grant

- 2016 - \$26,000- PI, Develop and Implement a Monitoring and Impact Evaluation Program to Monitor the Impact of HACCP Training in CARICOM Countries.

USDA/AFRI grant

- 2014-2016 -\$425,000, Co-PI, Reducing On-Farm Enteric Pathogens through Cropping Methods and Improved Food Safety Trainings PI. S. Micallef; I lead the research component that focused on monitoring and impact evaluation of UMD Extension GAP trainings.

Mars Inc grant

- 2012-2015 – \$274,000 - Co-PI, Assessment of the Risk of Salmonellosis Associated with Dry Dog Foods,

FDA Cooperative Agreement Grant with JIFSAN

- 2018 - \$40,000- Co-PI, Agricultural biotechnology education and outreach initiative aimed at understanding the best communicate concerns surrounding the risk of agricultural biotechnology to consumers.
- 2012 - \$150,000 PI, Develop and pilot a monitoring and evaluation program “Metrics” to evaluate the effectiveness of JIFSAN’s Training Programs.

Ministry of Health, Malaysia grant

2013-2016 \$25,000 Co-PI, Conduct monitoring and evaluation work on all the JIFSAN course held during this period.

Bill and Melinda Gates Foundation grant

- 2009-2012 - \$2.69 million, PI, Aflacontrol Project: Exploring the Scope of Cost-Effective Aflatoxin Risk Reduction Strategies in Maize and Groundnut Value Chains so as to Improve Market Access of the Poor in Africa” in Kenya and Mali.

DFID grant

- 2007-2010 -\$4.6 million, PI, Identifying Pro-Poor HPAI Risk Reduction Strategies in Indonesia, Nigeria, Ghana, Kenya, and Ethiopia

CGIAR System Wide Livestock Program grant

- 2006-2007 – \$40,000 – PI, Seed Grant for writing full proposal on Identifying Cost-Effective Aflatoxin Risk Reduction Measures.

CGIAR Science Council grant

- 2006 - \$21,000 – PI, Investigation on Food safety research priorities for the CGIAR Science.

Training

- 2012-2018 – ILSI Fellowship program -\$320,000 for providing training and mentoring to selected fellows from ILSI country offices for three months in the Extended Risk Analysis fellowship program.

US Department of Agriculture:

- FAS/Borlaug (Training) Fellowship Program
 - Mentor 2 Ghanaian fellows in both in Risk Analysis and on also in Socio-economic survey design
 - 2017-2019 - \$40,000, PI. Fellow - Ernest Bonah, Regulatory Officer, Ghana’s Food and Drug Authority.
 - 2016-2017 - \$36,000, Co PI, PI. P. Turner. Fellow - Rose Omari, Senior Research Scientist at the Science and Technology Policy Research Institute, Ghana’s Council for Scientific and Industrial Research; I led the training on risk analysis and socio-economic survey design. \$6,000 went to Risk Program.

- Mentor **Zambian Fellows in Risk Analysis**
 - 2016-2017 - \$36,000, PI. Fellow - Maputa Kamulete-Liweleya, Senior Veterinary Officer at Zambia's Ministry of Agriculture and Livestock.
- **FAS/Cochrane Training Programs**
 - 2019 -\$125, 147 African Training on SPS, TBT, and TFA Agreements
 - 2018 - \$133,134 Kenya, South Africa, and Colombia Training on SPS and TBT Measures
 - 2017 -\$94,000, PI. Colombia Training Program in FSMA Requirements.
 - 2017 - \$124,000, PI. Training of Individuals from the Ministries of South Africa, Nigeria, and Ghana Training on SPS and TBT Measures.
- **FAS/Emerging Markets Program**
 - 2016-2017 - \$63,000, PI. Training of Individuals from the Ministry in Risk Analysis and Mentoring on them on Risk Ranking Approaches due to a WTO complaint for the Colombia National Food and Drug Surveillance Institute (INVIMA).

Jamaica National Compliance Regulatory Authority

- 2018 - \$35,000 Risk Analysis for Risk Managers Training.

Mars Inc.

- 2017-2018 \$126,000, PI. MARs Global Food Safety Center - Training in Quantitative Risk Assessment Methods.

Ministry of Health, Malaysia Collaboration between Food Safety and Quality Division, and University of Maryland,

- 2013-2016 \$190,000, Co-PI, Provide training for course on Risk Analysis for Risk Managers, Instruction to Food Law and Regulations, Food Defense and conduct monitoring and evaluation work on all the JIFSAN course held during this period. Note: amount listed just for the portion I was responsible for.
- 2016 \$10,000, PI, Provided training in metric and evaluation analysis to counterpart in Malaysia to do follow-up analysis on the multiplier effect.

TEACHING

2019 (as of Sept)

- Training in Good Agricultural Practice for Spice Producers – 3 week training in 4 regions of training India (Feb)
- Training in Risk Analysis – 1 week program in Hong Kong (Sept)

2018

- Training in Risk Analysis for Risk Managers – 4 day training in Jamaica

2017

- Training in Risk Analysis and How it Fits into Regulatory Process at a two day workshop on Regulatory Impact Analysis, Risk Analysis, and the Role of the Private Sector, Lusaka, Zambia.
- Risk Ranking and Risk Analysis for Risk Managers- co taught a week long course Colombia, followed by a 2 month mentoring on risk ranking.
- Risk Analysis for Risk Managers -co taught a week long course at Mars Food Safety. Training Center in China.
- Sanitary and Phytosanitary Measures, Technical Barriers to Trade, and Risk Analysis - Led a two week training for African Cochrane fellows from Nigeria, Ghana, and South Africa.
- Food Safety and the Requirements and Implementation Procedures of FSMA – led a two week training for Colombian Cochrane fellows.
- 3 month Extended Mentoring in Risk Analysis.

2016

- Risk analysis for Risk Managers – co-taught a 2 day course in China.
- 3 month Extended Mentoring in Risk Analysis.
- Introduction to Food Law and Regulation – 3 day course.

2015

- Risk Analysis for Risk Manager's co- taught a week long course at Malaysia's International Food Safety Training Laboratory.
- Refresher Quantitative Risk Assessment – 1 week co-taught.
- Advanced Quantitative Risk Assessment – 1 week co-taught.
- 3 month Extended Mentoring in Risk Analysis.

2014

- Introduction to Food Law and Regulation – co taught a 1 week Malaysia, and a 3 day at JIFSAN.
- Overview Risk Analysis Program –Costco 1-day, 1 day at GMA.
- Make up of Overview Risk Analysis from fall program due to government shutdown – 1 day.
- Refresher Quantitative Risk Assessment – 1 week co-taught.
- Advanced quantitative Risk Assessment – 1 week co-taught.
- 3 month Extended Mentoring in Risk Analysis.

2013

- Refresher Quantitative Risk Assessment – 1 week co-taught.
- Advanced quantitative Risk Assessment – 1 week co-taught.
- 3 month Extended Mentoring in Risk Analysis.

2012

- 3 month Extended Mentoring in Risk Analysis.

2002

- Co-Taught a 1 week program on the “Role of Risk Assessment in Meeting SPS Requirements,” to Former Soviet Union Ministerial Analysts in Ways to Meet SPS Requirements, Sponsored by USDA/APHIS Technical Assistance Program, Moscow, USSR, (November).

EXTENDED MENTORING IN RISK ANALYSIS

Through ILSI Coca-Cola 3 month fellowship:

- Xiaoyu Song (2012), China National Center for Food Safety Risk Assessment
- Ning Ma (2013), Chinese Center for Food Safety Risk Assessment
- Dyah Kusumastuti (2013), National Agency of Drug and Food Control, Republic of Indonesia
- Song Yan (2014), China National Center for Food Safety Risk Assessment
- Wang Ye-ru (2014), China National Center for Food Safety Risk Assessment
- Wei-Hsiang Chang (2015), National Cheng Kung University, Taiwan
- Aidong Liu (2015), China National Center for Food Safety Risk Assessment
- Chieh-Han Pu (2015), Taiwan Agricultural Chemicals and Toxic Substances Research Institute
- Pharrunrat Tanaviyutpakdee (2015), Mahidol University, Thailand
- Pingping Zhou (2015), China National Center for Food Safety Risk Assessment
- Ruby Apilado (2016), Food and Nutrition Research Institute, Philippines
- Dung Le Hong (2016), National Institute of Nutrition, in Vietnam
- Jiang Liang (2016), China National Center for Food Safety Risk Assessment
- Chalinee Srinimnuan (2016), Thai Food and Drug Administration
- Haixia Sui (2016), China National Center for Food Safety Risk Assessment
- Puspo Edi Giriwono (2017), Institute Pertanian in Bogor, Indonesia
- Ling Yong (2017), China National Center for Food Safety Risk Assessment
- Ching-Yu Tu (2018) Residue Control Division, Taiwan Agricultural Chemicals and Toxic Substances Research Institute, Council of Agriculture
- Weifeng Mao (2018) China National Center for Food Safety Risk Assessment
- Huihui Bao (2018) China National Center for Food Safety Risk Assessment

Through Malaysia Ministry of Health 3 month fellowship:

- Rosnizam Ismail (2013), Ministry of Health Malaysia
- Abdul Ghani bin Abu Samah (2013), Ministry of Health Malaysia

Through USDA Borlaug 3 month fellowship:

- Maputa Kamulete (2016), Ministry of Fisheries and Livestock, Zambia
- Rose Omari (2017), Council for Scientific and Industrial Research, Ghana
- Ernest Bonah (2018), Food and Drugs Authority, Ghana

Through USDA-Foreign Agricultural Service - 3 month fellowship:

- Rafiqul Islam (2015), Bangladesh Shrimp and Fish Foundation

Through MARS Food Safety Capacity Building Program: (August 2017-May 2018)

- Weina Chen, MARs
- Cindy Sun, MARs
- Chongtao Ge, MARs
- Ya Gao, MARs
- Silin Tang, MARs
- Lamin Jaiteh, Food Safety and Quality Authority of The Gambia
- Fiona Zheng, MARs
- Youjia Chen, MARs
- David Ji, Yangtze Delta Region Institute of Tsinghua University
- Jing Ren, MARs
- Irene Luo, MARs
- Feng Xu, MARs

KEY COLLABORATORS from developing countries associated with IFPRI and FAO Research Projects

Aflacontrol Project (2009- 2012)

- Hugo de Groote, International Maize and Wheat Improvement Centre (CIMMYT), Nairobi, Kenya
- Jonathon Hellin, International Maize and Wheat Improvement Centre (CIMMYT), Nairobi, Kenya
- George Mahuku, International Maize and Wheat Improvement Centre (CIMMYT), Mexico
- Farid Waliyar, International Crop Research Institute for the Semi-Arid Tropics (ICRISAT), Bamako, Mali
- Jupiter Ndjeunga, International Crop Research Institute for the Semi-Arid Tropics (ICRISAT), Niamey, Niger
- Charles Bett, Kenya Agricultural Research Institute (KARI), Katumani, Kenya
- Lamissa Diakite, Institut d'Economie Rural (IER), Bamako, Mali

HPAI Pro-Poor Project-PI (2008-2011)

- John Omiti, Kenya Institute for Public Policy Research and Analysis, Kenya
- Gezahegn Ayele, Ethiopia Institute for Agriculture Research, Ethiopia
- Akwasi Mensah-Bonsu, University of Ghana, Ghana
- Benjamin Okpukpara, Department of Agricultural Economics, University of Nigeria, Nsukka, Nigeria
- Nunung Nuryartono, International Center for Applied Finance and Economics, Indonesia

Public Private Partnership study in ensuring smallholder have market access-PI (dates)

- Devesh Roy, International Food Policy Research Center
- Marites Tiongco, International Food Policy Research Center, currently at La Salle University, Philippines.
- Julius Okello, formerly University of Nairobi (now International Potato Institute)
- Belem Avendaño, Universidad Autonoma de Baja California, Mexico

Livestock Industrialization study- co PI (2001-2003); PI Christopher Delgado

- Marites Tiongco, International Food Policy Research Center, currently at La Salle University, Philippines.
- Achilles Costales, University of the Philippines- Baguio.
- Ma. Angeles Catelo, University of the Philippines Los Banos.
- Nipon Poapongsakorn, Thai Development Research Institute, Thailand
- Viroj Naranong, Thai Development Research Institute, Thailand

- Geraldo Sant' Ana de Camargo Barros, Center for Advanced Studies on Applied Economics, University of Sao Paulo, Brazil
- Sergio de Zen, Center for Advanced Studies on Applied Economics, University of Sao Paulo, Brazil
- Rajesh Mehta, Research and Information System for Developing Countries, New Delhi, India
- Vijay Paul Sharma, Indian Institute of Management, Ahmedabad, India
- Pratap S. Birthal, National Centre for Agricultural Economics and Policy Research, New Delhi, India

SERVICE ACTIVITIES

Reviewing Activities for Journals and Presses

- International Food Research Journal
- Food Policy
- Journal of Development Studies
- Chinese Economic Review
- World Development
- Journal of Rural Studies
- Journal of Development Studies
- Cambridge University Press,

Reviewing Activities for Agencies and Foundations

- Invited reviewer for concept note for the UK call Zoonoses & Emerging Livestock System: Reducing the Risk to Livestock and people – 17 million pounds of funding (DFID, 4 Research Councils, and NERC) (March 2013, 2014).
- Invited reviewer of proposals to the World Bank (2011, 2012).

Reviewer of reports and discussion papers for NGOs and International Organizations

- Reports for Pew Charitable Trust
- Discussion papers for IFPRI
- Reports for the World Bank's Agriculture and Rural Development Department
 - Several proposals for World Bank's Agriculture and Rural Development Department.
 - Report People, Pathogens, and our Planet, volume 2 The Economics of One Health 2012
- Reports for FAO
 - State of the World Towards a Responsible Livestock Future 2009.
 - FAO's Guidelines for the Preparation of Livestock Sector Reviews 2011.
 - Reviewer Milk human nutrition dairy products 2013

Committees, Working groups, Panels, etc.

- Appointed to the National Academy of Science on the Institute of Medicine's consensus committee on "Strengthening Food Safety Regulatory Systems in Developing Countries," (2019-2020).
- Steering Committee Member for the Produce International Partnership for Education and Outreach, (2017 to present) – JIFSAN and Produce Safety Alliance <http://international.jifsan.umd.edu/catalogue/course/pip>
- Steering committee of HESI COMPARE (The COMprehensive Protein Allergen REsource repository of protein sequences of known or putative allergens) (2016 to present.) <http://comparedatabase.org/about-compare-database/>
- Working group member. Of "Spillover Effects of Export-Oriented SPS Capacity Building on Domestic Food Safety" study, Standard and Trade Facility, World Trade Organization (2017-present).
- Working group member of the Food Safety Risk Analysis Training Consortium for the Americas (2016 to present) https://www.paho.org/panaftosa/index.php?option=com_content&view=article&id=1771:food-safety-risk-analysis-consortium-fsrisk&Itemid=0.
- Working group member on the Global Food Ethics Project at John Hopkins Berman Institute for Bioethics. Prepared paper "Ethical Issues for Food Safety in the Context of Global Food Security" (2014-2015) <http://www.bioethicsinstitute.org/globalfoodethics>
- Academic Co-Chair Technical Working group on Monitoring and Evaluation of the World Bank Global Food Safety Partnership, (2012 to 2015).
- Working group member on the Risk Analysis Committee of the World Bank Global Food Safety Partnership, (2012 to 2015).

- Member of the Expert Panel for a Global Regulatory Competency and Curricula Project with the Regulatory Affairs Professionals Society and the Global Food Protection Institute, (2014-2015).
<http://www.ifpti.org/global-regulatory-competency-and-curricula-project>
- Member of Advisory Panel for Report People, Pathogens, and our Planet, volume 2 The Economics of One Health 2012
- Appointed to the National Academy of Science on the Institute of Medicine's consensus committee on "Strengthening Core Elements of Food Safety Regulatory Systems in Developing Countries," (2010-2012).
- Steering committee member of the CGIAR System Wide-Livestock Committee (2007-2010 when it disbanded)

Corporate and Other Board Memberships

- Scientific Advisory Board Member of the Institute for Food and Agricultural Literacy at UC Davis, World Food Center, (2015 to the present).
- Board of Directors, Center for Foodborne Illness, Research & Prevention, (2013- to the present).
- International Editorial Board Member of the International Food Research Journal, (2013-2015).

SELECT INVITED SPEAKING ENGAGEMENTS- EXTERNAL REQUESTS BASED ON RESEARCH EXPERTISE (Last 5 years)

2018 "Food Safety and Capacity Building Efforts in Developing Countries," Agriculture, Food Security and Human Health: How to Ethically and Sustainably Feed a Growing Population panel, at a Conference on Food and Agriculture: A Global Conversation at the Institute for Food and Agricultural Literacy, University of California, Davis, CA (March).

Discussion leader for a talk on 'Biotxin Exposure Risks and Vulnerable Populations'. Gordon Research Conference on Mycotoxins and Phycotoxins at Stonehill College in Easton, MA June 2018

Speaker on Risk Analysis and regulatory requirements at workshop on Regulatory Impact Analysis in Lusaka, Zambia. organized by the Standards Alliance, which is a public-private partnership between the American National Standards Institute and the U.S. Agency for International Development (April 2017)

Invited speaker and discussant on Aflatoxin Risk reduction measures for the Global Good Project on Aflatoxin Control, a part of Intellectual Ventures a private technology investment fund of Bill Gates focusing on major issues in global health and development. <http://www.intellectualventures.com/globalgood/>, Seattle, Washington, December 2014.

Invited speaker on JIFSAN's metrics work for the GAPs Program, Korean National Academy of Agricultural Science, Jeonju City, Korea, October, 2014.

Invited speaker on behavior factors affection adoption of aflatoxin risk reduction measures at a meeting held by the Global Donor Platform for Rural Development, to inform donors of research needs surround aflatoxin and nutritional impact; <https://www.donorplatform.org/nutrition-and-agricultural-development/latest/1282-need-for-mapping-donors-work-on-aflatoxin-control-outcomes-of-berlin-expert-meeting>, Berlin, Germany, October 2014.

Invited speaker on Impact of the Livestock Industrialization Process on Smallholders at NRC Committee on Considerations for the Future of Animal Science Research. National Academy of Sciences, Washington, DC, May 2014.

Invited speaker on JIFSAN's metrics work at the American Association Post-Conference Workshop: Economic Analysis and Food Safety: The Food Safety Modernization Act; Economic Research Service, Washington, DC, August 2013, www.aaea.org/2013am/schedule-of-events/pre-and-post-conference-workshops#foodsafety.

Invited speaker on Voices from the Field (Kenya and Mali): Findings from the AFLAControl Program at USAID Mycotoxins: Triple Threat to African Development meeting, Woodrow Wilson International Center for Scholars, Washington, DC, February 2013.

Invited participant and discussant in colloquium, 'Trends in Urbanization and Changes in Farm Size in Developing Countries: Implications for Agricultural Research' a convening of CGIAR Independent Science and Partnership to map out and better understand key developments that are likely to impact heavily on developing-country agriculture over the

next 20 years in terms of the dynamics of farm size and the effects of increasing urbanization on food demand; Boston, Massachusetts, Jan 2013; http://sites.tufts.edu/willmasters/files/2010/07/UrbanizationAndFarmSize_GFS2013.pdf

AWARDS

American Association for the Advancement of Science Risk Fellowship 1998-2000.

Office of Risk Assessment and Cost-Benefit Analysis in the Office of Chief Economist, USDA. 1999-2000.

Office of Epidemiology and Risk Assessment in the Office of Public Health, FSIS, USDA. 1998-1999.

Center for Energy Management and Policy, University of Pennsylvania.

Departmental Scholarship for Doctorate Work 1993-1995.

Teaching Assistant Fellowship Small, Micro Enterprises 1990-1991.

MEMBERSHIPS AT VARIOUS TIMES: American Association of Agricultural Economics, International Association of Agricultural Economists, American Association for the Advancement of Science, Society for Risk Analysis, International Association for Food Protection

COUNTRY PROJECT EXPERIENCE: Brazil, China, Costa Rica, Ethiopia, Ghana, India, Indonesia, Kenya, Mali, Mexico, Nigeria, the Philippines, Thailand, the US, Vietnam, and Zambia

COUNTRY TEACHING EXPERIENCE: China, Colombia, Jamaica, Malaysia, the U.S., and Zambia