

Former Agricultural Economics Faculty

Edna Loehman (1943-)

Dr. Edna Loehman came to the Department of Agricultural Economics in February, 1981 from SRI, International, a consulting firm. She had previously been an assistant professor for six years at the University of Florida in agricultural economics. She was familiar with Purdue before she became a member of the faculty, because she received a Masters degree in Mathematics in 1967 and a PhD in Economics in 1970 from Purdue.



Dr. Loehman developed and taught Applied Welfare Economics for a number of years and enjoyed interacting with students on applied policy projects. For this course, she developed a novel teaching approach: computer programs to teach price equilibrium and pricing for externalities and public goods. Dr. Loehman also initiated and taught a course in Mathematical Economics and a course in Environmental Economics.

Initially, she participated and taught in the Center for Public Policy and Public Administration under Bob Whitford before the center was abolished in 1985. This was an activity she very much enjoyed, because the center provided opportunities to interact with students from all over the world. As a result of this experience, and her background in mathematics and science, she tried to help foster interdisciplinary teaching at Purdue. Interdisciplinary courses taught by Dr. Loehman included Common Property Resource Management with William Hoover in Forestry, Water Resource Management co-taught with Indrajeet Chaubey from Agricultural & Biological Engineering, and a reading course on policy issues with George Horwich in Economics and Lee Raymond in Political Science.

In terms of honors, Dr. Loehman was listed as one of the top 50 women economists in terms of citations for 1971-87 (in Ratings of Women Economists by Citations, Journal of Economics and Business, 1990). She also received an NSF Career Advancement Award for 1994-95. Several of her students received American Agricultural Economics PhD dissertation awards. Dr. Loehman was elected chairman (one of the first) for 1987-88 of the Committee of Women in Agricultural Economics.

Dr. Loehman was very active in several cooperative regional research projects, including NE-165 (Private Strategies, Public Policies, and Food System Performance), NC-230 (Integrating biophysical functions of riparian systems with management practices and policies), and W-1190 (Interfacing technological, economic, and institutional principles for managing inter-sector mobilization of water).

Four important themes of her research were: 1) measurement of non-market values; 2) cooperation and cost-sharing; 3) risk and insurance; 4) water pricing and management. She was one of the pioneers of contingent valuation and conducted several environmental or public goods research applications. She was also one of the first to use cooperative game theory for cost sharing and later developed a pricing method for shared goods which was tested with experimental economics. She developed applications in the risk arena, including agricultural insurance and cropping with weather risk. Dr. Loehman also developed several novel theories, including an alternative to expected utility theory and a new method for water pricing that ensures cost recovery.

Dr. Loehman published and wrote chapters for two edited books while at Purdue: *Water Quantity/Quality Management and Conflict Resolution*, 1995 (co-author Ariel Dinar), and *Designing Institutions for Environmental and Resource Management*, 1998 (co-author Marc Kilgour). When she was on the faculty at the University of Florida, she edited *Economics and Decision-making for Environmental Quality*, 1974 (co-author J. Richard Connor).

In terms of service and community involvement, she served for many years on the University Compensation and Benefits Committee and for three years on a university-wide proposal review committee (Kinley Trust Selection Committee). She was an Associate for the Tippecanoe Soil and Water Conservation District and served on the Lafayette Groundwater Protection Committee. She has been a member of the Bach Chorale, the Lafayette Peace Coalition, the Sierra Club, and the Holocaust Remembrance Committee.

Her daughter Rachel Loehman, and before her death her mother Gisela Tusak, encouraged and supported these endeavors.

Through the years, Dr. Loehman has enjoyed interacting with the excellent graduate students in the department and her outstanding colleagues with their important applications of policy analysis, a hallmark of the Purdue agricultural economics department.