Socio-Economic Aspects of Wastewater Use in Agriculture: *A Bibliography*

Munir A. Hanjra



International Water Management Institute
Colombo, Sri Lanka
December 2000

Acknowledgements

This document was prepared while the author was associated with International Water Management Institute (IWMI), Colombo, Sri Lanka under a consultancy contract. All remaining errors are those of the author's, not that of IWMI.

Munir A. Hanjra

Consultant (Economist), International Water Management Institute (IWMI), P.O. Box 2075, Colombo, Sri Lanka.

Email: m.hanjra@cgiar.org mahanjra@hotmail.com

Socio-Economic Aspects of Wastewater Use in Agriculture: A Bibliography

- 1. Abu-Ashour, J., and H. Lee. 2000. Transport of bacteria on sloping soil surfaces by runoff. *Environmental Toxicology*, May 15(2):149-153.
- 2. Ahmad, Mahmood. 2000. Water pricing and markets in the Near East: policy issues and options. *Water Policy*. Vol. 2, No. 3, pp. 229-242.
- 3. Ajmal, M. and A. U. Khan. 1985. Effect of textile factory effluent on soil and crop plants. *Environmental Pollution*. Vol. 37, pp.131-148.
- 4. Alberini, A., G. S. Eskeland, A. Krupnic, and G. McGranahan. 1996. Determinants of diarrheal disease in Jakarta. *Water Resources Research*. Vol. 32, No. 7, pp. 2259-2269.
- 5. Alex Winter-Nelson, and Koffi Amegbeto.1998. Option values to conservation and agricultural price policy: application to terrace construction in Kenya. *American Journal of Agricultural Economics*, v80 n2 p409(10)
- 6. Ali, I. 1987. Wastewater riteria for irrigationin arid regions. *Journal of Irrigation and Drainage Engineering*. Vol. 113. No.2, pp. 173-183
- 7. Ali-Shtayeh, M. S., R. M. F. Jamous, and S. I. Abu-Ghdeib. 1998. Ecology of cycloheximide-resistant fungi in field soils receiving raw city wastewater or normal irrigation water. *Mycopathologia* 144(1):39-54.
- 8. Aljaloud, A. A., G. Hussain, A. J. Alsaati, and S. Karimulla. 1995. Effect of wastewater irrigation on mineral composition of corn and sorghum plants in a pot experiment. *Journal of Plant Nutrition* 18(8):1677-1692.
- 9. Alnakshabandi, G. A., M. M. Saqqar, M. R.Shatanawi, M. Fayyad, and H. Alhorani. 1997. Some environmental problems associated with the use of treated wastewater for irrigation in Jordan. *Agricultural Water Management*, Jul 34(1):81-94.
- 10. Al-Salem Saqer S. 1996. Environmental considerations for wastewater reuse in agriculture, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 345-353
- 11. Altaf, M. A., D. Whittington, R. Jamal, and V. K. Smith. 1993. Rethinking rural water supply policy in the Punjab, Pakistan. *Water Resources Research*. Vol. 29, No. 7, pp. 1943-1954.
- 12. Andricevic, R. and V. Cvetkovic. 1996. Evaluation of risk from contaminants migrating by groundwater. *Water Resources Research*. Vol. 32, No. 3, pp. 611-621.
- 13. Asano, T., M. Maeda and M. Takaki. 1996. Wastewater reclamation and reuse in Japan: overview and implementation examples. *Water Science and Technology*. Vol. 34, No. 11, Pp. 219-226
- 14. Asano, T., R. G. Smit and G. Tchobanoglous. 1985. Municipal wastewater: treatment and reclaimed water characteristics. In: Irrigation with reclaimed

- municipal wastewater a guidance manual. Pettygrove G. S., and T. Asano (eds), Chelsea, Mich:. Lewise Publishers, Inc.
- 15. Asano, Takashi and Audrey D. Levine. 1996. Wastewater reclamation, recycling and reuse: past, present, and future, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 1-14
- 16. Assadian, N. W., L. B. Fenn, M. A. Flores-Ortiz and A. S. Ali. 1999. Spatial variability of solutes in a pecan orchard surface-irrigated with untreated effluents in the upper Rio Grande River basin, *Agricultural Water Management*, Volume 42, Issue 2, *Pp.*..143-156
- 17. Assadian, N. W., L. C. Esparza, L. B. Fenn, A. S. Ali, S. Miyamoto, U. V. Figueroa and A. W. Warrick. 1998. Spatial variability of heavy metals in irrigated alfalfa fields in the upper Rio Grande River basin, *Agricultural Water Management*, Volume 36, Issue 2, *Pp.*..141-156
- 18. Aucejo, A. J., Ferrer, C. Gabaldon, P. Marzal, and A. Seco. 1997. Diagnosis of boron, fluorine, lead, nickel and zinc toxicity in citrus plantations in Villarreal, Spain. *Water, Air, and Soil Pollution* 94(3-4):349-360.
- 19. Augustin, S., M. R. Wagner, J. Chenault, and K. M. Clancy. 1997. Influence of pulp and paper mill wastewater on chrysomela scripta (coleoptera, chrysomelidae) performance and populus plant traits. *Environmental Entomology* 26(6):1327-1335.
- 20. Aziz, O., A. Inam, SAMIULLAH, and R. H. Siddiqi. 1996. Long term effects of irrigation with petrochemical industry wastewater. *Journal of Environmental Science and Health*, Part A: Environmental Science and Engineering and Toxic and Hazardous Substance Control 31(10):2595-2620.
- 21. Bahri Akissa and Francois Brissaud. 1996. Wastewater reuse in Tunisia: assessing a national policy, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 87-94
- 22. Bamezai, A. 1997. On weather normalizing customer-level billing data. *Water Resources Research*. Vol. 33, No. 5, pp. 1171-1178.
- 23. Banin, A. 1999. Recycling and reuse of wastewater for irrigation in the Mediterranean region: Approaches, precautions and potentials. *Annali di Chimica* Jul-Aug. 89(7-8):479-488.
- 24. Barbier Edward B. 1994 Valuing environmental functions: tropical wetlands. *Land Economics*, v70 n2 p155(19)
- 25. Barden, J. B., R. S. Larson, and E. E. Herricks. 1991. Impact targets versus discharge standards in agricultural pollution management. *American Journal of Agricultural Economics*, pp.388-397
- 26. Barrett, James and Kathleen Segerson. 1997. Prevention and Treatment in Environmental Policy Design. *Journal of Environmental Economics and Management*, 33, pp. 196-213.

- 27. Barton, L., C. D. A. Mclay, L. A. Schipper, and C. T. Smith. 1998. Procedures for characterising denitrification rates in a wastewater-irrigated forest soil. *Australian Journal of Soil Research* 36(6):997-1008.
- 28. Baruch, W., Avnimelech Yoram, and Juanico Marcelo. 1996. Salt enrichment of municipal sewage: new prevention approaches in Israel. *Environmental Management*, Volume 20, Issue 4, *Pp.*..487-495
- 29. Baumol, W. and W. Oates. 1988. The theory of environmental policy. Cambridge University Press.
- 30. Beare, Stephen C., Rosalyn Bell, and Brian S. Fisher. 1998. Determining the value of water: the role of risk, infrastructure constraints, and ownership. (Waugh Lecture). *American Journal of Agricultural Economics*, v80 i5 p916(2)
- 31. Bergstorm, J., J. Stoll, and A. Randall, (1989) 'Informational Effects in Contingent Markets', *American Journal of Agricultural Economics*, 71: 685-691.
- 32. Bjornstad, D. J. and J. R. Kahn, (1996) 'Characteristics of Environmental Resources and their Relevance for Measuring Value', in Bjornstad, D. J. and J. R. Kahn, (eds.) *The Contingent Valuation of Environmental Resources:*Methodological Issues and Research Needs, Edward Elgar, Brookfield, USA.
- 33. Blumenthal, Ursula J., D. Duncan Mara, Rachel M. Ayres, Enrique Cifuentes, Anne Peasey, Rebecca Stott, Donald L. Lee and Guillermo Ruiz-Palacios. 1996. Evaluation of the WHO nematode egg guidelines for restricted and unrestricted irrigation, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 277-283
- 34. Bohm, R. A., T. J. Essenburg, and W. F. Fox. 1993. Sustainability of potable water services in the Philippines. *Water Resources Research*. Vol. 29, No. 7, pp. 1955-1963.
- 35. Bole, J. B. and R. G. Bell. 1978. Land application of municipal sewage wastewater: yield and chemical composition of forage crops. *Journal of Environmental Quality*. Vol. 7, pp. 222-226.
- 36. Bond, W. J. 1999. Effluent irrigation- an environmental challenge for soil science. *Australian Journal of Soil Research*, Volume 36, Number 4, pp. 543(13).
- 37. Bontoux, J., and G. Courtois. 1996. Wastewater reuse for irrigation in France. *Water Science and Technology* 33(10-11):45-49.
- 38. Bouwer, Herman. 1996. Issues in artificial recharge, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 381-390
- 39. Boyle, K. (1989) 'Commodity Specification and the Framing of Contingent Valuation Questions', *Land Economics*, 65: 57-63.
- 40. Boyle, K. J. and R. C. Bishop, (1985) The Total Value of Wildlife Resources: Conceptual and Empirical Issues, Invited Paper, Association of Environmental and Resource Economists Workshop on Recreational Demand Modeling, Boulder, Colombia., 17-18 May.

- 41. Boyle, K., R. Bishop, and M. Welsh, (1986) 'Starting Point Bias in Contingent Valuation Surveys', *Land Economics*, 61: 188-194.
- 42. Bramwell, Sharon A., and P. V. Devi Prasad. 1995. Performance of a Small Aquatic Plant Wastewater Treatment System under Caribbean Conditions. *Journal of Environmental Management*, Vol. 44, No. 3, pp. 213-22
- 43. Breaux, Andree, Stephen Farber and John Day. 1995. Using Natural Coastal Wetlands Systems for Wastewater Treatment: An Economic Benefit Analysis. *Journal of Environmental Management*, Vol. 44, No. 3, pp. 285-291
- 44. Brill Eyal, Eithan Hochman, and David Zilberman. 1997. Allocation and pricing at the water district level. *American Journal of Agricultural Economics*, v79 n3 p952(12)
- 45. Brill, E Downey, Jr., and Nakamura, Masahisa. 1978. A Branch and Bound Method for Use in Planning Regional Wastewater Treatment Systems. *Water Resources Research*. Vol. 14 (1). p 109-18.
- 46. Brookshire, D. S. and D. Whittington. 1993. Water resource issues in developing countries. *Water Resources Research*. Vol. 29, No. 7, pp. 1883-1888.
- 47. Brookshire, D., B. Ives, and W. Schulz, (1979) 'The Valuation of Aesthetic Preferences', *Journal of Environmental Economics and Management*, 3(4): 325-346.
- 48. Brosnan, T. M., and M. L. O'Shea. 1996. Sewage abatement and coliform bacterai trends in the lower Hudson-Raritan Estuary since passage of the Claen Water Act. *Water Environment Resaerch*. Vol. 68, No. 1
- 49. Bruins, H. J. 1997. Drought mitigation policy and food provision for urban Africa: Potential use of treated wastewater and solar energy. Arid Lands Newsletter No. 42 Fall/Winter. http://ag.arizona.edu/OALS/ALN/aln42/bruins.html>. accesses 05.12.00
- 50. Bryant Kelly J., James W. Mjelde, and Ronald D. Lacewell. 1993. An intraseasonal dynamic optimization model to allocate irrigation water between crops. *American Journal of Agricultural Economics*, v75 n4 p1021(9)
- 51. Burlocarbonell, F., A. Carbonellbarrachina, A. Vidalroig, and J. Mataixbeneyto. 1997. Sensitivity of salinity in loquat plants (Eriobotryae Japonica L). *Fresenius Environmental Bulletin* 6(7-8):481-488.
- 52. Burness, H. S., and J. P. Quirk. 1980. Economic aspects of appropriate water rights. *Journal of Environmental Economics and Management*, 7, pp. 372-388
- 53. Byström Olof. 1998. The nitrogen abatement cost in wetlands. *Ecological Economics*, 26, pp. 321-331
- 54. Cao, B. and S. Ikeda. 2000. Exposure assessment of heavy metals resulting from farmland application of wastewater sludge in Tianjin, China: The examination of two existing national standards for soil and farmland used sludge. *Risk Analysis*. Vol. 20, No. 5, pp. 613-625

- 55. Cardoch, Lynette, J. W. Day Jr., J. M. Eybczyk and G. P. Kemp. 2000. An Economic Analysis of Using Wetlands for Treatment of Shrimp Processing Wastewater--A Case Study in Dulac, LA. *Ecological Economics*. Vol. 33 (1). p 93-101.
- 56. Carmichale, J. J. and K. M. Strzepek. 2000. A multiple-organic-pollutant simulation/optimization model of industrial and municipal wastewater loading to a reverine environment. *Water resources research*. Vol. 36, No. 5, pp. 1325-1332.
- 57. Carriker Gordon L. 1998. Advances in the Economics of Environmental Resources: Marginal Cost Rate Design and Wholesale Water Markets, vol. 1. (Review)_(book reviews). *American Journal of Agricultural Economics*, v80 i4 p880(2)
- 58. Carson, R. T., N. E. Flores, K. M. Martin, and J. L. Wright, (1994), Contingent Valuation and Revealed Preference Methodologies: Comparing the Estimates for Quasi-Public Goods. *Land Economics*, Volume 72, Number 1, Pages 80-99.
- 59. cAziz, O., M. Manzar, and A. Inam. 1995. Suitability of petrochemical industry wastewater for irrigation. *Journal of Environmental Science and Health*, Part A: Environmental Science and Engineering and Toxic and Hazardous Substance Control 30(4):735-751.
- 60. Chakravorty Ujjayant, Eithan Hochman, and David Zilberman. 1995. A Spatial Model of Optimal Water Conveyance. *Journal of Environmental Economics and Management*. 29, pp. 25-41.
- 61. Chang ,A. C., A. L. Page, T. Asano, and I. Hespanhol. 1996. Developing human health-related chemical guidelines for reclaimed wastewater irrigation. *Water Science and Technology* 33(10-11):463-472.
- 62. Chattopadhyay, B., S. Datta, A. Chatterjee, and S. K. Mukhopadhyay. 2000. The environmental impact of waste chromium of tannery agglomerates in the east Calcutta wetland ecosystem. *Journal of the Society of Leather Technologists and Chemists* Mar-Apr. 84(2):94-100.
- 63. Chaudhry, M. A., <u>M. Ahmad (Hanjra)</u>. 1992. An investigation into water pollution and genesis of family health care budget-a case study of Faisalabad, Pakistan. *Journal of Animal and Plant Sciences*, Vol. 2, No. 1-2.
- 64. Choe Chongwoo, and Iain Fraser. 1999. An Economic Analysis of Household Waste Management. *Journal of Environmental Economics and Management*. 38, pp. 234-246.
- 65. Choe, KyeongAe, Dale Whittington and Donald T. Lauria. 1996. The economic benefits of surface water quality improvements in developing countries: A case study of Davao, Philippines. *Land Economics*, Volume 72, Number 4, Pages 519-537.
- 66. Choe, KyeongAe, Dale Whittington and Donald T. Lauria. 1996. The economic benefits of surface water quality improvements in developing countries: A case study of Davao, Philippines. *Land Economics*, Volume 72, Number 4, Pages 519-537.

- 67. Cifuentes E., Gomez M., Blumenthal U., Tellez-Rojo M. M., Romieu I., Ruiz-Palacios G., and Ruiz-Velazco S. 2000. Risk factors for Giardia intestinalis infection in agricultural villages practicing wastewater irrigation in Mexico. *American Journal of Tropical Medicine & Hygiene*. 62(3):388-392.
- 68. Clarke, E. (1971) 'Multipart Pricing of Public Goods', *Public Choice*, 11, 17-33.
- 69. Coase, R. (1960) 'The Problem of Social Cost", *Journal of Law and Economics*, October.
- 70. Collinge, R. A. 1992. Revenue neutral water conservation: Marginal cost pricing with discount coupons. *Water Resources Research*. Vol. 28, No. 3, pp. 617-622.
- 71. Connor, J. D., G. M. Perry, and R. M. Adams. 1995. Cost effective abatement of multiple production externalities. *Water Resources Research*. Vol. 31, No. 7, pp. 1789-1796.
- 72. Cook, F. J., F. M. Kelliher, and S. D. Mcmahon. 1994. Changes in infiltration and drainage during wastewater irrigation of a highly permeable soil. *Journal of Environmental Quality*. May-Jun. 23(3):476-482.
- 73. Coscera, G., D. Baglio, H. Skejo-Andresen, and A. B. Paya-Perez. 1998. Speciation of organic matter, nitrogen and phosphorous on soils irrigated with industrial wastewaters. *Fresenius Environmental Bulletin*. Nov-Dec. 7(12A Special Issue SI):833-840.
- 74. Crane, David Cooper. 1996. Balancing pollutant emissions and economic growth in a physically conservative world. *Ecological Economics*, 16, pp. 257-268
- 75. Croce Fulvio, David Hendricks, Joe Pollara, Susan Poulsom, Rosalaura Oliveri, Maria Valeria Torregrossa, Laura Valentino and Ranieri Candura. 1996. Operational efficiency of a pilot plant for wastewater reuse, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 443-450
- 76. Crook James and Rao Y. Surampalli. 1996. Water reclamation and reuse criteria in the U.S., *Water Science and Technology*, Vol. 33, No. 10-11, pp. 451-462
- 77. Crutchfield, S. R., D. Leston, and A. S. Malik. 1994. Feasibility of point-nonpoint source trading for managing agricultural pollutant loadings to coastal waters. *Water Resources Research*. Vol. 30, No. 10, pp. 2825-2836.
- 78. Culver, T. B., and C. A. Shoemaker. 1992. Dynamic optimal control for groundwater remediation with flexible management periods. *Water Resources Research*. Vol. 28, No. 3, pp. 629-641.
- 79. Cummings, R. G. and G. W. Harrison, (1993) Identifying and Measuring Nonuse Values for Natural and Environmental Resources, A Critical Review of the Sate of the Art, Report Prepared for the American Petroleum Institute.
- 80. Dabi, Daniel Davou and Wiliam P. Anderson. 1999. Development of a Commodity-by-Industry Economic-Ecological Model of Water Demand in a Rural Economy, *Journal of Environmental Planning and Management*. Vol. 42 (5). p 707-34.

- 81. Danielson, L., Thomas J. Hoban, Gregory van Houtven and John C. Whitehead. 1995. Measuring the benefits of local public goods: Environmental quality on Gaston County, North Carolina. *Applied Economics*, 27, Pages 1253-1260.
- 82. Danielson, L., Thomas J. Hoban, Gregory van Houtven and John C. Whitehead. 1995. Measuring the benefits of local public goods: Environmental quality on Gaston County, North Carolina. *Applied Economics*, 27, Pages 1253-1260.
- 83. Darwish, M. R., F. A. El-Awar, M. Sharara, and B. Hamdar. 1999. Economic-environmental approach for optimum wastewater utilization in irrigation: A case study in Lebanon. *Applied Engineering in Agriculture*. 15(1):41-48
- 84. Dasgupta Susmita, Hemamala Hettige, and David Wheeler. 2000. What Improves environmental Compliance? Evidence from Mexican Industry. *Journal of Environmental Economics and Management*. Vol. 39, No. 1, pp. 39-66
- 85. Davis, R. (1963) 'Recreation Planning as an Economic Problem', *Natural Resources Journal*, 3(2): 239-249.
- 86. Day, A. D. and T. C. Tucker. 1977. Effects of treated wastewater on growth, fibre, protein and aminoacids content of sorghum grains. *Journal of Environmental Quality*. Vol. 6, No. 3, pp. 325-327.
- 87. Day, A. D., F. A. Taher, and F. R. H. Katterman. 1975. Influence of treated municipal wastewater on growth, fibre, acid soluble nucleotide, protein and aminoacid content in wheat grain. *Journal of Environmental Quality*. Vol. 4, No. 2, pp. 167-169.
- 88. Deacon, R. T. 1991. Rent seeking and the common pool. Working Paper in Economics # 3-92, Department of Economics, University of California, Santa Barbra, USA.
- 89. Degens, B. P., L. A. Schipper, J. J. Claydon, J. M. Russell, and G. W. Yeates. 2000. Irrigation of an allophanic soil dairy factory effuent for 22 years: responses of nutreint storage and soil biota. *Australian Journal of Soil Research*, 38, 25-35
- 90. Dickie, M., S. Gerking and M. Agee. 1991. Healt benefits of AMP control: The case of stratospehric ozone depletion and skin damage risks. In: Opschoor, J. B. and D. W. Pearce, eds. Persistant Pollutants: Economics and Policy. Dordrecht: Kluwer Academic.
- 91. Dinar, A. and D. Yaron. 1986. Treatment optimization of municipal wastewater and reuse for regional irrigation. *Water Resources Research*. Vol. 22, No. 3, pp. 331-338.
- 92. Dinar, A., and J. Letey. 1991. Agricultural water marketing, allocative efficiency, and drainage reduction. *Journal of Environmental Economics and Management*, 20, pp. 201-223
- 93. Dinar, A., D. Yaron, and Y. Kannai. 1986. Sharing regional cooperative gains from using effluent for irrigation. *Water Resources Research*. Vol. 22, No. 3, pp. 339-344.

- 94. Dixon, J. A., L. F. Scura, R. A. Carpenter, and P. B. Sherman. 1994. Economic analysis of environmental impacts. Earthscan, London.
- 95. Domonte, M. H. F. M., A. N. Angelakis, and T. Asano. 1996. Necessity and basis for establishment of European guidelines for reclaimed wastewater in the Mediterranean region. *Water Science and Technology*. 33(10-11):303-316.
- 96. Downs, T. J., E. Cifuentes, E. Ruth, and I. Suffet. 2000. Effectiveness of natural treatment in a wastewater irrigation district of the Mexico City region: A synoptic field survey. *Water Environment Research*. Jan-Feb.72(1):4-21.
- 97. Downs, T. J., E. Cifuentes-Garcia, and I. M. Suffet. 1999. Risk screening for exposure to groundwater pollution in a wastewater irrigation district of the Mexico City region. *Environmental Health Perspectives*. Jul. 107(7):553-561.
- 98. Dixon, J. A., L. F. Scura, R. A. Carpenter, and P. B. Sherman. 1994. Economic analysis of environmental impacts. Earthscan, London.
- 99. Drewes Joerg E. and Martin Jekel. 1996. Simulation of groundwater recharge with advanced treated wastewater, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 409-418
- 100. Easa, M. E., M. M. Shereif, A. I. Shaaban, K. H. Mancy. Public health implications of waste water reuse for fish production. *Water Science and Technology*, Vol. 32, No. 11, 1995, pp. 145-152
- 101. Easter, K. W. 1993. Economic failure plagues developing countries' public irrigation: An assurance problem. *Water Resources Research*. Vol. 29, No. 7, pp. 1913-1922.
- 102. Edwards, S. F. 1988. Option prices for groundwater protection. *Journal of Environmental Economics and Management*, 15, pp. 475-487.
- 103. Eheart, J. W. 1980. Cost efficiency of transferable discharge permits for the control of BOD discharges. *Water Resources Research*. Vol. 16, No. 6, pp. 980-986.
- 104. Eiswerth, M. E. and W. D. Shaw. 1997. Adjusting benefit transfer values for inflation. *Water Resources Research*. Vol. 33, No. 10, pp. 2381-2385.
- 105. Ejaz, M. S. and R. C. Peralta. 1995. Modelling for optimal management of agricultural and domestic wastewater loading to streams. *Water Resources Research*. Vol. 31, No. 4, pp. 1087-1096.
- 106. El Hamouri Bouchaïb, Abderrahim Handouf, Mohamed Mekrane, Mohamed Touzani, Addi Khana, Khalid Khallayoune and Taïeb Benchokroun. 1996. Use of wastewater for crop production under arid and saline conditions: yield and hygienic quality of the crop and soil contaminations, Water Science and Technology, Vol. 33, No. 10-11, pp. 327-334
- 107. El-Gohary, F., S. El-Hawarry, S. Badr and Y. Rashed. 1995. Wastewater treatment and reuse for aquaculture. *Water Science and Technology*. Vol. 32, No. 11, Pp. 127-136

- 108. EPA, NSW-Australia, (1993) Valuation of Environmental Impacts, Technical Report, Environmental Protection Agency, New South Wales, Australia, August
- 109. EPA, NSW-Australia. 1993. Valuation of Environmental Impacts, Technical Report, Environmental Protection Agency, New South Wales, Australia, August
- 110. Epp, Donald J., C. E. Young and Daniel Rossi. 1982. Benefits from Joint Treatment of Municipal and Poultry-Processing Wastewater.. *Water Resources Research*. Vol. 18 (5). p 1587-90.
- 111. Espey, J. Espey, and W. D. Shaw. 1997. Price elasticity of residential demand for water: meta analysis. *Water Resources Research*. Vol. 33, No. 6, pp. 1369-1374.
- 112. Evans, R. and F. Harris, (1982) 'A Bayesian Analysis of the Free Rider Meta-Game', *Southern Economic Journal*, 49: 137-149.
- 113. Faby, J. A., F. Brissaud, and J. Bontoux. 1999. Wastewater reuse in France: Water quality standards and wastewater treatment technologies. *Water Science and Technology*. 40(4-5):37-42.
- 114. Farooq, S. and Z. I. Ansari. 1983. Wastewater reuse in Muslim countries: An Islamic perspective. Environmental Management. Vol. 7, No. 2, pp. 119-123
- 115. Fass, S. M. 1993. Water and poverty: Implications for water planning. *Water Resources Research*. Vol. 29, No. 7, pp. 1975-1981.
- 116. Faust, Jeffrey G., and, Rhonda L;Obesrt. 1996. Economic value of biosolids to farmers. *BioCycle*, Emmaus, Vol. 3, No. 1, p67
- 117. Faux, J., and G. M. Perry. 1999. Estimating irrigation water value using hedonic price analysis: a case srudy in Malheur County, Oregon. *Land Economics*. v75 i3 p440
- 118. Fernandez, Linda. 1997. Estimation of Wastewater Treatment Objectives through Maximum Entropy. *Journal of Environmental Economics and Management*. Vol. 32 (3). p 293-308.
- 119. Fernandez, Linda. 1997. Recovering Wastewater Treatment Objectives: An Application of Entropy Estimation for Inverse Control Problems: Applying maximum entropy to econometric problems. Fomby, Thomas B. Hill, R. Carter, eds., *Advances in Econometrics*, vol. 12. Greenwich, Conn. and London: JAI Press. p 217-35.
- 120. Filip Z., S. Kanazawa, and J. Berthelin. 1999. Characterization of effects of a long-term wastewater irrigation on soil quality by microbiological and biochemical parameters. *Journal of Plant Nutrition and Soil Science-*Zeitschrift fur Pflanzenernahrung und Bodenkunde. 162(4):409-413.
- 121. Filip, Z., S. Kanazawa, and J. Berthelin. 2000. Distribution of microorganisms, biomass ATP, and enzyme activities in organic and mineral particles of a long-term wastewater irrigated soil. *Journal of Plant Nutrition and Soil Science-* Zeitschrift für Pflanzenernahrung und Bodenkunde. 163(2):143-150.

- 122. Firth, J. N. M., S. J. Ormerod, and H. J. Prosser. 1995. The past present and future of waste management in Wales: a case study of the environmental problems in a small European region. *Journal of Environmental Management*, n44, 163-179.
- 123. Fisher Anthony, David Fullerton, Nile Hatch, and Peter Reinelt. 1995. Alternatives for Managing Drought: A Comparative Cost Analysis. *Journal of Environmental Economics and Management*, 29, pp. 304-320.
- 124. Fleming R. A., and R. M. Adams. 1997. The Importance of Site-Specific Information in the Design of Policies to Control Pollution. *Journal of Environmental Economics and Management*, 33, pp. 347-358.
- 125. Fleming, R. A., R. M. Adams, and C. S. Kim. 1995. Regulating groundwater pollution: Effects of geological response assumptions on economic efficiency. *Water Resources Research*. Vol. 31, No.4, pp. 1069-1076.
- 126. Flynn, K. 1999. An overview of punlic health and urban agriculture: water, soil and crop contamination & emerging urban zoonoses. IRDC, Ottawa, Canada.
- 127. Fomby, Thomas B. and R. Carter Hill, eds. 1997. Applying maximum entropy to econometric problems. *Advances in Econometrics*, vol. 12. Greenwich, Conn. and London: JAI Press. p xii, 358.
- 128. Forster D. Lynn, Eric C. Smith, and Diane Hite. 2000. A bioeconomic model of farm management practices and environmental effluents in the Western Lake Erie basin. *Journal of Soil and Water Conservation*, Spring, v55 I2 p177.
- 129. Forsyth, M. 1997. The economics of site investigation for site protection: sequential decision making under uncertanity. *Journal of Environmental Economics and Management*. 34. pp. 1-34
- 130. Fraas, Arthur G. and Vincent G. Munley. 1984. Municipal Wastewater Treatment Cost. *Journal of Environmental Economics and Management*. Vol. 11 (1). p 28-38.
- 131. Frederick, K. D. 1998. Marketing water: the obstacles and the impetus. *Resources*, Summer, I132, Resources for the Future, Washington DC. www.rff.org accessed 18.10.00
- 132. Frederick, K., T. VandenBerg, and J. Hanson. 1996. Economic values of the freshwater in the United States. Summary of findings. Resources for the Future, Washington, DC. http://www.rff.org/reports/1996.htm#Economic Values of Water>, Accessed October 2000
- 133. Freeman, A. M. (1979) *The Benefits of Environmental Improvement: Theory and Practice*, London, John Hopkins Press.
- 134. Friedel, J. K., T. Langer, J. Rommel, C. Siebe, and M. Kaupenjohann. 1999. Increase in denitrification capacity of soils due to addition of alkylbenzene sulfonates. *Biology and Fertility of Soils*. 28(4):397-402.
- 135. Gallegos E., A. Warren, E. Robles, E. Campoy, A. Calderon, Ma. G. Sainz, P. Bonilla and O. Escolero. 1999. The effects of wastewater irrigation on

- groundwater quality in Mexico, *Water Science and Technology*, Volume 40, Issue 2, *Pp...*45-52.
- 136. Ganoulis Jacques and Anastasia Papalopoulou. 1996. Risk analysis of wastewater reclamation and reuse, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 297-302
- 137. Goraldez, C., and G. Fox. 1995. An economic analysis of ground water contamination from agricultural nitrate emissions in Southern Ontario. *Canadain Journal of Agricultural Economics*, 43, pp. 387-402
- 138. Graves, P. E. (1991) 'Aesthetics', Chapter 7 in Braden and Kolstad (eds.) 1991, *Measuring the Demand for Environmental Quality*, Elsevier, North-Holland.
- 139. Green Gareth, David Sunding, David Zilberman, and Doug Parker. 1996. Explaining irrigation technology choices: a microparameter approach. *American Journal of Agricultural Economics*, Nov 1996 v78 n4 p1064(9)
- 140. Greenway Margaret and John S. Simpson. 1996 Artificial wetlands for wastewater treatment, water reuse and wildlife in Queensland, Australia, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 221-229
- 141. Groves, T. (1973) 'Incentives in Teams', *Econometrica*, 41, 617-631
- 142. Guariso, G., D. Maidment, S. Rinaldi, and R. Soncini-Sessa. 1981. Supply-demand coordination in water resource management. *Water Resources Research*. Vol. 17, No. 4, pp. 776-782.
- 143. Guillaume Philippe and Dimitri Xanthoulis. 1996. Irrigation of vegetable crops as a means of recycling wastewater: applied to Hesbaye frost, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 317-326
- 144. Haarhoff Johannes and Ben Van der Merwe. 1996. Twenty-five years of wastewater reclamation in windhoek, Namibia. *Water Science and Technology*, Vol. 33, No. 10-11, pp. 25-35
- 145. Habbari, K., A. Tifnouti, B. Bitton, and A. Mandil. 2000. Geohelminthic infections associated with raw wastewater reuse for agricultural purposes in Beni-Mellal, Morocco. *Parasitology International*, 48, 249-254.
- 146. Hailu Atakelty, and Terrence S. Veeman. 2000. Environmentally Sensitive Productivity Analysis of the Canadian Pulp and Paper Industry, 1959-1994: An Input Distance Function Approach. *Journal of Environmental Economics and Management*, 40, pp. 251-274
- 147. Hamoda Mohamed F. and Saed M. Al-Awadi. 1996. Improvement of effluent quality for reuse in a dairy farm, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 79-85
- 148. Haneman, W. M. (1991) 'Willingness to Pay and Willingness to Accept: How Much Can They Differ?', *American Economic Review*, 81(3), 636-647.
- 149. <u>Hanjra M. A.</u> 1999, "Water Pollution Abatement by Textile Industry in Pakistan: Cost-Benefit Analysis and Policy Implications". Master of Economics, Research

- Thesis, School of Economics and Financial Studies, Macquarie University, Sydney, Australia.
- 150. <u>Hanjra, M. A.</u>, 1996. Environmental Assessment: A Case Study of Water Pollution and Leisure and Sleep Disturbances. *Acta Scientia*
- 151. <u>Hanjra, M. A.</u>, K. Hussain. 1996. National environmental quality standards and industrial effluents: a case study of Faisalabad Pakistan. *Acta Scientia*, Vol. 3, No. 1-2
- 152. <u>Hanjra, M. A.</u>, N. A. Hanjra. 1994. Environmental impact assessment: a case study of potable water pollution and human productivity loss in Faisalabad, Pakistan. *Journal of Animal and Plant Sciences*, Vol.4, No.3-4.
- 153. <u>Hanjra, M. A.</u>, N. A. Hanjra. 1995. Environmental education and awareness: time, inconvenience cost and willingness to pay analysis. *Acta Scientia*.
- 154. Hanke, Steve H. and Roland W. Wentworth. 1981. On the Marginal Cost of Wastewater Services. *Land Economics*. Vol. 57 (4) . p 558-67.
- 155. Hanley, N. (1989) Problems in Valuing Environmental Improvements Resulting from Agricultural Policy Changes: The Case of Nitrate Pollution, Discussion Paper no. 8/91, Department of Economics, University of Stirling, Scotland.
- 156. Hanley, N. 1991. The problems in valuing environmental improvements resulting from agricultural policy changes: In Dubggard, A. and A. Nielsen Eds. Economic aspects of environmental regulation in agriculture. Kiel: Wissenschaftsverlag Vaul Kiel.
- 157. Hanley, N. and A. Munro, (1992) The Effects of Information in Contingent Markets for Environmental Goods: A Survey of Some New Evidence, Institute of Economic Research, Queens University, Discussion Paper 848.
- 158. Hanley, N. and C. L. Spash (1993) *Cost Benefit Analysis and the Environment*, Edward Elgar Publishing Company, London.
- 159. Hanley, N., and C. L. Spash. 1993. *Cost Benefit Analysis and the Environment*, Edward Elgar Publishing Company, London.
- 160. Haruvy, N., A. Hadas, and Aviva Hadas. 1997. Cost assessment of various means of averting environmental damage and ground water contamination from nitrate seepage. *Agricultural Water Management*, 32, pp. 307-320.
- 161. Haruvy, N., R. Offer, A. Hadas, and I. Ravina. 1999. Wastewater irrigation-economic concerns regarding beneficiary and hazardous effects of nutrients. *Water Resources Management*. 13(5):303-314.
- 162. Haruvy, Nava and Ezra Sadan. 1994. Cost benefit analysis of waste water treatment in the water scarce economy of Israel: A case study. *Journal of Financial Management and Analysis*, 1, Pages 44-51.
- 163. Haruvy, Nava. 1994. Recycled water utilization in Israel focus on waste water pricing versus national and farmers objectives. *Journal of Financial Management and Analysis*, Volume 7, Number 2, Pages 39-48.

- 164. Haruvy, Nava. 1997. Agricultural reuse of wastewater: nation-wide cost-benefit analysis, *Agriculture, Ecosystems & Environment*, Volume 66, Issue 2, *Pp.*..113-119
- 165. Heinzmann, B., and F. Sarfert. 1995. An integrated water management concept to ensure a safe water supply and high drinking water quality on an ecologically sustainable basis. *Water Science and Technology*. Vo. 31, No. 8, pp. 281-291.
- 166. Heinzmann, B., and I. Chorus. 1994. Restoration concept for lake tegel, a major drinking and bathing water resource in a densely populated rea. *Environmental Science and Technology*. 28(8):1410-1416.
- 167. Henriques Irene, and Perry Sadorsky. 1996. The Determinants of an Environmentally Responsive Firm: An Empirical Approach. *Journal of Environmental Economics and Management*, 30, pp. 381-395
- 168. Hoehn, J. and A. Randal, (1987) 'A Satisfactory Benefit Cost Indicator for Contingent Valuation Method', *Journal of Environmental Economics and Management*, 14(3): 226-247.
- 169. Hoevenagel, R. (1990) The Validity of the Contingent Valuation Method: Some Aspects on the Basis of Three Dutch Studies, Paper to the European Association of Environmental and Resource Economists Conference, Venice.
- 170. Holcombe, Randall G. 1991. Privatization of Municipal Wastewater Treatment. *Public Budgeting and Finance*. Vol. 11 (3). p 28-42.
- 171. Holcombe, Randall G. 1992. Revolving Fund Finance: The Case of Wastewater Treatment.. *Public Budgeting and Finance*. Vol. 12 (3). p 50-65.
- 172. Horan Richard D., James S. Shortle, and David G. Abler. 1999. Green payments for nonpoint pollution control. (Clean Water Action Plan). *American Journal of Agricultural Economics*, v81 i5 p1210
- 173. How, J., and M. R. Wagner. 1996. The effect of papermill wastewater irrigation and Gypsum soil amendments on sodium accumulation by cottonwood and soil. *Agricultural Water Management*. 31(3):295-306.
- 174. How, J., and M. R. Wagner. 1996. The effect of papermill wastewater and organic amendments on sodium accumulation by potted cottonwoods. *Environmental Pollution*. 92(2):113-118.
- 175. Howe, C. W., and J. A. Dixon. 1993. Inefficiencies in water project design and operation in the third world: An economic perspective. *Water Resources Research*. Vol. 29, No. 7, pp. 1889-1894.
- 176. Howe, Jonathan and Michael R. Wagner. 1996. The effect of papermill wastewater irrigation and gypsum soil amendments on sodium accumulation by cottonwood and soil, *Agricultural Water Management*, Volume 31, Issue 3, *Pp...*.295-306
- 177. Huang, G. H., W. P. Anderson, and B. W. Baetz. 1994. Environmental inputoutput analysis and its application to regional solidwaste management planning. *Journal of Environmental Management*. v42, n1, pp. 63-79.

- 178. Hussain, K. and M. A. Hanjra. 1996. National environmental quality standards and industrial effluents: A case study of Faisalabad Pakistan. *Acta Scientia*, Vol. 3, No. 1-2.
- 179. Idelovitch, Emanuel and Klas Ringskog. 1997. Wastewater treatment in Latin America: Old and new options. *Directions in Development series*. Washington, D.C.: World Bank. p ix, 68.
- 180. Ingberman Daniel E. 1995. Siting Noxious Facilities: Are Markets Efficient? *Journal of Environmental Economics and Management*, 29, pp. S20-S33 (doi:10.1006/*Jeem*.1995.1058).
- 181. Ingwersen, J., T. Streck, J. Utermann, and J. Richter. 2000. Ground water preservation by soil protection: Determination of tolerable total Cd contents and Cd breakthrough times. *Journal of Plant Nutrition and Soil Science-*Zeitschrift fur Pflanzenernahrung und Bodenkunde. 163(1):31-40.
- 182. Isnard P. 1998. Assessing the Environmental Impact of Wastewaters. *Ecotoxicology and Environmental Safety*, Vol. 40, No. 1/2, pp. 88-93
- 183. IUCN, (1980) *The World Development Strategy*, International Union for Conservation of Nature and Natural Resources, Geneva.
- 184. IUCN. 1980. World Conservation Strategy, IUCN, Geneva.
- 185. IUCN. 1994. The Pakistan national conservation strategy. World Conservation Union, Karachi, Pakistan.
- 186. James, D. (1994) *The Application of Economic Techniques in Environmental Impact Asessment*, Kluwer Academic Publishers, The Netherlands.
- 187. James, D. 1994. The Application of Economic Techniques in Environmental Impact Assessment. Kluwer Academic Publishers.
- 188. Jian, X. and S. Sidney. 2000. Environmental policy alanysis: An environmental computable-general equilibrium approach for developing countries. *Journal of Policy Modelling*. Vol. 22, No. 4, pp. 453-489.
- 189. Jimenezcisneros, B., and A. Chavezmejia. 1997. Treatment of Mexico city wastewater for irrigation purposes. *Environmental Technology*. 18(7):721-729.
- 190. Johansson, P. (1993) *Cost Benefit Analysis of Environmental Change*, Cambridge University Press, pp 24-45.
- 191. Johansson, P. 1993. *Cost Benefit Analysis of Environmental Change*, Cambridge University Press, pp 24-45.
- 192. John M. Anderson. Current water recycling initiatives in Australia: scenarios for the 21st century, *Water Science and Technology*, Vol. 33, No. 10-11, 1996, pp. 37-43
- 193. Jolis Domènec, Robin A. Hirano, Paul A. Pitt, Ashley Müller and Daniel Mamais. 1996. Assessment of tertiary treatment technology for water reclamation in San Francisco, California, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 181-192

- 194. Jordan, M. J., K. J. Nadelhoffer, and B. Fry. 1997. Nitrogen cycling in forest and grass ecosystems irrigated with n-15-enriched wastewater. *Ecological Applications*. 7(3):864-881.
- 195. Juanico Marcelo, Yossi Azov, Beny Teltsch and Gedaliah Shelef. 1995. Effect of effluent addition to a freshwater reservoir on the filter clogging capacity of irrigation water, *Water Research*, Volume 29, Issue 7, *Pp.*.1695-1702
- 196. Juanico Marcelo. 1996. The performance of batch stabilization reservoirs for wastewater treatment, storage and reuse in Israel, *Water Science and Technology*, Volume 33, Issues 10-11, *Pp.*..149-159
- 197. Juanico, M., and G. Shelef. 1994. Design, operation and performance of stabilization reservoirs for wastewater irrigation in Israel. *Water Research*. 28(1):175-186.
- 198. Juanico, M., Y. Azov, B. Teltsch, and G. Shelef. 1995. Effect of effluent addition to a freshwater reservoir on the filter clogging capacity of irrigation water. *Water Research*. 29(7):1695-1702.
- 199. Kanarek A. and M. Michail. 1996. Groundwater recharge with municipal effluent: Dan Region Reclamation Project, Israel. *Water Science and Technology*. Vol. 34, No. 11, Pp. 227-233
- 200. Karpiscak Martin M., Charles P. Gerba, Pamela M. Watt, Kennith E. Foster and Jeanne A. Falabi. 1996. Multi-species plant systems for wastewater quality improvements and habitat enhancement, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 231-236
- 201. Kask, S. B., and J. F. Shogren. 1994. Benefit transfer protocol for long-term health risk valuation: A case of surface water contamination. *Water Resources Research*. Vol. 30, No. 10, pp. 2813-2823.
- 202. Kennedy John O. S.. 1995. Changes in Optimal Pollution Taxes as Population Increases. *Journal of Environmental Economics and Management*, 28, pp. 19-33
- 203. Kenstch, J. (1989) 'The Endowment Effect and the Evidence of Nonreversible Indifference Curves', *American Economic Review*, December 1277-1284.
- 204. Kher, L. K. and S. Sorooshian. 1986. Identification of water demand models from noisy data. *Water Resources Research*. Vol. 22, No. 3, pp. 322-330
- 205. Kiel Katherine A., and Katherine T. McClain. 1995. House Prices during Siting Decision Stages: The Case of an Incinerator from Rumor through Operation. *Journal of Environmental Economics and Management*, 28, pp. 241-255
- 206. Kim Dong Y. and James A. Burger. 1997. Nitrogen transformations and soil processes in a wastewater-irrigated, mature Appalachian hardwood forest, *Forest Ecology and Management*, Volume 90, Issue 1, pp.1-11
- 207. Kim, C. S., and G. D. Schaible. 2000. Economic benefits resulting from irrigation water use: theory and an application to groundwater use. *Environmental and Resource Economics*, 17, pp. 73-87

- 208. Kim, C. S., C. Sandretto, and J. Hostetler. 1996. Effects of farmer response to nitrogen fetrilizer management practices on groundwater quality. *Water Resources Research*. Vol. 32, No. 5, pp. 1411-1415.
- 209. Kim, D. Y. and J. A. Burger. 1997. Nitrogen transformations and soil processes in a wastewater-irrigated mature appalachian hardwood forest. *Forest Ecology and Management*. 90(1):1-11.
- 210. Kinje, J. W., S. A. Parthaper, M. C. S. Sahrawat. 1998. How to manage salinity in irrigated lands: A selective review with particular reference to irrigation in develoing countries. SWIM Paper 2, International Water Management Institute, Colombo, Sri Lanka.
- 211. Klausner, S. D. and L. T. Kardos. 1975. Oxygen relationships in a soil treated with sewage effluent. *Journal of Environmental Quality*. Vol. 4, No. 2, pp. 174-178.
- 212. Kolstad C. D. and J. B. Braden, (1991) 'Environmental Demand Theory', Chapter 2 in Braden and Kolstad (eds.), *Measuring the Demand for Environmental Quality*, Elsevier, North-Holland,
- 213. Kolstad C. D. and J. B. Braden. 1991. Environmental Demand Theory', Chapter 2 in Braden and Kolstad (eds.), *Measuring the Demand for Environmental Quality*, Elsevier, North-Holland,
- 214. Kontos Nick and Takashi Asano. 1996. Environmental assessment for wastewater reclamation and reuse projects, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 473-486
- 215. Kozloff, K. S., J. Taff, and Y. Wang. 1992. Microtargeting the acquisition of cropping rights to reduce nonpoint source water pollution. *Water Resources Research*. Vol. 28, No. 3, pp. 623-628.
- 216. Krauss, G. D., and Page A. L. 1997. Wastewater sludge and crop production. *Biocycle*, Emmaus, Feb , v38, I2, pp. 74-82
- 217. Krofta Milos, Dusan Miskovic, David Burgess and Edward Fahey. 1996. The investigation of the advanced treatment of municipal wastewater by modular flotation-filtration systems and reuse for irrigation, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 171-179
- 218. Krupnick, A., D. Austain, and V. McConnel. 2000. Economic and policy issues in reducing nitrate loadings to the Chesapeak Bay. Project summary. Resources for the Future, Washington, DC. http://www.rff.org/proj_summaries/99files/krupnick_99nitrate_load.htm, Accessed October.
- 219. Kruse, E. A. and G. W. Barrett. 1985. Effects of municipal sludge and fertilizer on heavy metal accumulation in earthworms. Environmental Pollution (Series A). Vol. 38, pp. 235-244.
- 220. Krzysztofowicz, R. 1986. Optimal water supply planning based on seasonal runoff forecasts. *Water Resources Research*. Vol. 22, No. 3, pp. 313-321.

- 221. Lant, C. L. and R. S. Roberts. 1990. Greenbelts in: riparian wetlands, intrisic values, and market failure. *Environment and Planning A.* vol. 22, pp. 1375-1388.
- 222. Laposata Matthew M., and William A. Dunson. 2000. Effects of Spray-Irrigated Wastewater Effluent on Temporary Pond-Breeding Amphibians, *Ecotoxicology and Environmental Safety*, Vol. 46, No. 2, pp. 192-201
- 223. Laposata, M. M., and W. A. Dunson. 2000. Effects of treated wastewater effluent irrigation on terrestrial salamanders. *Water, Air, and Soil Pollution*. 119(1-4):45-57.
- 224. Law Ian B. 1996. Rouse Hill -- Australia's first full scale domestic non-potable reuse application, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 71-78
- 225. Lee, Chih-Sheng, and Ching-Gung Wen. 1996. Application of Multiobjective Programming to Water Quality Management in a River Basin. *Journal of Environmental Management*, Vol. 47, No. 1, pp. 11-26
- 226. Leggett Christopher G., and Nancy E. Bockstael. 2000. Evidence of the Effects of Water Quality on Residential Land Prices. *Journal of Environmental Economics and Management*. 39. pp. 121-144.
- Lemly, A.D. 1993. Subsurface Agricultural Irrigation Drainage: The Need for Regulation. Regulatory Toxicology and Pharmacology, Vol. 17, No. 2, pp. 157-180
- 228. Leones, J., B. Colby, D. Cory, and L. Ryan. 1997. Measuring regional economic impacts of streamflow depletion. *Water Resources Research*. Vol. 33, No. 4, pp. 831-838.
- 229. Li, Y. H., and Y. L. Cui. 1996. Real Time forecasting of irrigation water requirements of paddy fields. *Agricultural Water Management*, 31, pp. 185-193
- 230. Limvorapitak, Qwanruedee and Dhira Phantumvanit. 1996. User Charge for Wastewater Management in Industrial Province. Energy, environment and the economy: Asian perspectives. Kleindorfer, Paul R. Kunreuther, Howard C. Hong, David S., eds., *New* Horizons in Environmental Economics series. Cheltenham, U.K.: Elgar; distributed by Ashgate, Brookfield, Vt. p 251-58.
- 231. Lindhall, E. (1919) 'Just Taxation-a Positive Solution', in R. Musgrave and A. Peacock (Eds.), *Classics in the Theory of Public Finance*, London: Macmillan.
- 232. Liran, A., M. Juanico, and G. Shelef. 1994. Coliform removal in a stabilization reservoir for wastewater irrigation in Israel. *Water Research*. 28(6):1305-1314.
- 233. Loehman Edna, and Ariel Dinar. 1994. Cooperative Solution of Local Externality Problems: A Case of Mechanism Design Applied to Irrigation. *Journal of Environmental Economics and Management*, 26, pp. 235-256
- 234. Loehman, E., J. Orlando, J. Tschirhart, and A. Whinston. 1979. Cost allocation for regional wastewater treatment system. *Water Resources Research*. Vol. 15, No. 2, pp. 193-202.

- 235. Loomis John, Paula Kent, Liz Strange, Kurt Fausch and Alan Covich. 2000. Measuring the total economic value of restoring ecosystem services in an impaired river basin: results from a contingent valuation survey. *Ecological Economics*, 33, pp.103-117
- 236. Loomis, J. B. 1996. Measuring the economic benefits of removing dams and resorting the Elwha River: Results of a contingent valuation survey. *Water Resources Research*. Vol. 32, No. 2, pp. 441-447.
- 237. Loomis, J. R. and A. Gonzalez-Caban. 1997. How certain are the visitors of their economic values of river recreation: An evaluation using repeated questioning and revealed preference. *Water Resources Research*. Vol. 33, No. 5, pp. 1187-1193.
- 238. Loomis, John B., Paula Kent, Liz Strange, Kurt Fauch and Covich. 2000. Measuring the Total Economic Value of Restoring Ecosystem Services in an Impaired River Basin: Results from a Contingent Valuation Survey. *Ecological Economics*. Vol. 33 (1). p 103-17.
- 239. Lovei, L., and D. Whittington. 1993. Rent-extracting behavior by multiple agents in the provision of municipal water supply: A case study of Jakarta, Indonesia. *Water Resources Research*. Vol. 29, No. 7, pp. 1965-1974.
- 240. Lupi, Frank. 1998. Valuing the effects of water quality on recreational resources: discussion. 1998. (Valuing the Effects of Water Quality on Recreational Resources)(response to Jakus et al., Phaneuf et al., Schuhmann and Easley, this issue, pp. 1019, 1025, 1032). *American Journal of Agricultural Economics*, v80 i5 p1038(4)
- 241. Lyon, R. M. and S. Farrow. 1995. An economic analysis of Clean Water Act issues. *Water Resources Research*. Vol. 31, No. 1, pp. 213-233.
- 242. Maeda Masahiro, Kiyomi Nakada, Kazuaki Kawamoto and Masataka Ikeda. 1996. Area-wide use of reclaimed water in Tokyo, Japan, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 51-57
- 243. Magesan, G. N., J. Dalgety, R. Lee, J. Luo. and A. J. van Oostrom. 1999. Preferential flow and water quality in two New Zealand soils previously irrigated with wastewater. *Journal of Environmental Quality*. 28(5):1528-1532.
- 244. Majumdar, P. P. and T. S. V. Ramesh. 1997. Real-time reservoir operation for irrigation. *Water Resources Research*. Vol. 33, No. 5, pp. 1157-1164.
- 245. Maler, K. G. 1992. Production Function Approach in Developing Countries, Beijer Reprint Series No. 6, Beijer Institute, Stockholm, 1992
- 246. Maler, K. G., (1992) Production Function Approach in Developing Countries, Beijer Reprint Series No. 6, Beijer Institute, Stockholm, 1992
- 247. Malik Arun S., David Letson, and Stephen R. Crutchfield. 1993. Point/nonpoint source trading of pollution abatement: choosing the right trading ratio. *American Journal of Agricultural Economics*. v75 n4 p959(9)

- 248. Mandl, C. E. 1981. A survey of mathematical optimization models and algorithms for designing and extending irrigation and wastewater networks. *Water Resources Research*. Vol. 17, No. 4, pp. 769-775.
- 249. Mapp, H. P., D.J. Bernardo, G.J. Sabbagh, S. Geleta, and K.B. Watkins. 1994. Economic and environmental impacts of limiting nitrogen use to protect water quality: a stochastic regional analysis. *American Journal of Agricultural Economics*, v76 n4 p889(15)
- 250. Mara D. D. 2000. The production of microbiologically safe effluents for wastewater reuse in the Middle East and North Africa. *Water, Air, & Soil Pollution*. 123(1-4):595-603.
- 251. Marecos do Monte Helena Maria F., Andreas N. Angelakis and Takashi Asano.1996. Necessity and basis for establishment of European guidelines for reclaimed wastewater in the Mediterranean region, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 303-316 ---RR
- 252. Maria Burke. 2000. Managing China's water resources, *Environmental Science and Technology*, Volume 34, Issue 9, *Pp.*.218A-221A
- 253. Marten, G. C., W. E. Larson and C. E. Clapp. 1980. Effects of municipal wastewater effluent on performance and feed quality of maize vs. reed canarygrass. *Journal of Environmental Quality*. Vol. 9, No. 1, pp.137-141.
- 254. Maurer, M. A., F. S. Davies, and D. A. Graetz. 1995. Reclaimed wastewater irrigation and fertilization of mature redblush grapefruit trees on spodosols in Florida. *Journal of the American Society for Horticultural Science*. 120(3):394-402.
- 255. McBride, M. B. 1995. Toxic metal acculumation from agricultural use of sludge: Are USEPA regulations protective. *Journal of Environmental Quality*. Vol. 24, pp. 5-18
- 256. McCann Richard J. 1996. Environmental commodities markets: 'messy' versus 'ideal' worlds. *Contemporary Economic Policy*, v14 n3 p85(13)
- 257. McConnell, Virginia D. and Gregory E. Schwarz. 1992. The Supply and Demand for Pollution Control: Evidence from Wastewater Treatment.. *Journal of Environmental Economics and Management*. Vol. 23 (1). p 54-77..
- 258. McMahon, Paul and Meg Postle. 2000. Environmental valuation and water resources planning in England and Wales, *Water Policy*. Vol. 2, No. 6, pp. 397-421
- 259. Mendoza, C. A., G. Cortes, and D. Munoz. 1996. Heavy metal pollution in soils and sediments of rural developing district 063, Mexico. *Environmental Toxicology and Water Quality*. 11(4):327-333.
- 260. Meng, R. and D. Smith. 1990. The valuation of risk and death in public sevtor decision making. *Canadian Public Policy*, Vol. 16, pp. 137-144

- 261. Merrett, Stephen. 1997. Introduction to the economics of water resources: An international perspective.. Anham, Md. and Oxford: Rowman and Littlefield. p xv, 211. 1997.
- 262. Miceli Thomas J., and Kathleen Segerson. 1993. Regulating Agricultural Groundwater Contamination: A Comment. *Journal of Environmental Economics and Management*, 25, pp. 196-200
- 263. Mills Richard A. and Takashi Asano. 1996. A retrospective assessment of water reclamation projects, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 59-70
- 264. Milon, J. (1989) 'Contingent Valuation Experiments for Strategic Behaviour', Journal of Environmental Economics and Management, 17: 293-308.
- 265. Misra, R. N. and P. K. Behera. 1991. The effect of paper industry effluent on growth, pigment, carbohydrate and protein of rice seedlings. *Environmental Pollution*. Vol. 72, pp.159-167.
- 266. Mitchell, R. C. and R. T. Carson. 1989. Using Surveys to Value Public Goods: The Contingent Valuation Method. Resources for the Future, Washington, D.C.
- 267. Mitchell, R. C. and R. T. Carson. 1989. Using Surveys to Value Public Goods: The Contingent Valuation Method. Resources for the Future, Washington, D.C.
- 268. Mjelde, J. W., R. M. Adams, B. L. Dixon and P. Garcia. 1984. Using farmers' actions to measure crop loss due to air pollution. *Journal of air pollution control association*. Vol. 31, pp. 360-364.
- 269. Molden, R., R. Sakthivadivel, C. J. Perry, C. de Fraiture and W. H. Kloezen. 1998. Indicators for Comparing Performance of Irrigated Agricultural Systems. **IWMI Research Report No. 20.** International Water Management Institute, Colombo, Sri Lanka.
- 270. Moncur, J. E. T., and R. L. Pollock. 1996. Accounting induced distortions in public enterprise pricing. *Water Resources Research*. Vol. 32, No. 11, pp. 3355-3360.
- 271. Monnett, G. T., R. B. Reneau, and C. Hagedorn. 1995. Effects of domestic wastewater spray irrigation on denitrification rates. *Journal of Environmental Quality*. 24(5):940-946.
- 272. Monnett, G. T., R. B. Reneau, and C. Hagedorn. 1996. Evaluation of spray irrigation for on-site wastewater treatment and disposal on marginal soils. *Water Environment Research*. 68(1):11-18.
- 273. Montgomery, A. C., R. A. Pollak, K. Freeman, and D. Wahite. 1999. Pricing Biodiversity. *Journal of Environmental Economics and Management*, Vol. 39, No. 1. pp. 39-66.
- 274. Moore, M. R., and A. Dinar. 1995. Water and land as quantity-rationed inputs in California ariculture: empirical tests and water policy implications. *Land Economics*. Vol. 71 (4). p 558-67.

- 275. Mortvedt, J. J. and P. M. Giordano. 1975. Response of corn to Zinc and Aluminium in Municipal wastes applied to soil. *Journal of Environmental Quality*. Vol. 4, No. 2, pp. 171-174
- 276. Mujeriego Rafael, Lluís Sala, Maria Carbó and Josep Turet. Agronomic and public health assessment of reclaimed water quality for landscape irrigation, *Water Science and Technology*, Vol. 33, No. 10-11, 1996, pp. 335-344
- 277. Munasinghe, M. (1993) 'Environmental Economics and Sustainable Development', World Bank Environment Paper No 3, The World Bank, Washington, D. C. USA.
- 278. Munasinghe, M. 1993. Environmental Economics and Sustainable Development', World Bank Environment Paper No 3, The World Bank, Washington, D. C. USA.
- 279. Munasinghe, M., (1993) 'Environmental Economics and Sustainable Development, World Bank Environment Paper No. 3, The World Bank, Washington, D.C.
- 280. Musharrafieh, G. R., R. C. Peralta, L. M. Dudley, and R. J. Hanks. 1995. Optimizing irrigation management for pollution control and sustainable crop yield. *Water Resources Research*. Vol. 31, No. 4, pp. 1077-1086.
- 281. Nakamura, M. and E. D. Brill, Jr. 1979. Generating and evaluation of alternative plans for regional wastewater systems: An imputed value method. *Water Resources Research*. Vol. 15, No. 4, pp. 750-756.
- 282. Nakamura, M., E. D. Brill, Jr., and J. C. Liebman. 1981. Mutliperiod design of regional wastewater systems: Generating and evaluating alternative plans. *Water Resources Research*. Vol. 17, No. 5, pp. 1339-1348
- 283. Nakamura, Masahisa and E. D. Brill Jr. 1979. Generation and Evaluation of Alternative Plans for Regional Wastewater Systems: An Imputed Value Method.. *Water Resources Research*. Vol. 15 (4). p 750-56.
- 284. Nakamura, Masahisa, E. Downey Brill, Jr. and Jon C. Liebman. 1981. Multiperiod Design of Regional Wastewater Systems: Generating and Evaluating Alternative Plans. *Water Resources Research*. Vol. 17 (5). p 1339-48.
- 285. National Research Council. 1996. Use of reclaimed water and sludge in food crop production. National Academy Press, Washington DC. ---R
- 286. Nemetz, Peter N. 1980. System Solutions to Urban Wastewater Control. *Journal of Environmental Economics and Management*. Vol. 7 (2). p 108-22.
- 287. Nieswiadomy, M. L. 1992. Estimating urban residential demand: effects of price structure, conservation, and education. *Water Resources Research*. Vol. 28, No. 3, pp. 609-615.
- 288. NOAA (1993) Report of the NOAA Panel on Contingent Valuation, Miemo date 12 January 1993, National Oceanic and Atmospheric Administration, USA.

- 289. North, J. H. and C. C. Griffin. 1993. Water source as a housing characteristic: Hedonic property valuation and willingness to pay for water. *Water Resources Research*. Vol. 29, No. 7, pp.1923-1929.
- 290. O'Leary William. 1996. Wastewater recycling and environmental constraints at a base metal mine and process facilities, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 371-379
- 291. Olivieri, Adam W., Don M. Eisenberg, Robert C. Cooper, George Tchobanoglous and Paul Gagliardo. 1996. Recycled water -- a source of potable water: City of San Diego health effects study, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 285-296
- 292. Oron Gideon. 1996. Management modeling of integrative wastewater treatment and reuse systems, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 95-105
- 293. Ostrom, E. 1993. Design principles in long-enduring irrigation institutions. *Water Resources Research*. Vol. 29, No. 7, pp. 1907-1912.
- 294. Ouazzani Naïla, Khadija Bousselhaj and Younes Abbas. 1996. Reuse of wastewater treated by infiltration percolation, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 401-408
- 295. Oztekin, T., L. C. Brown, M. P. Holdsworth, A. Kurunc, and D. Rector. 1999. Evaluating drainage design parameters for wastewater irrigation applications to minimize impact on surface waters. *Applied Engineering in Agriculture*. 15(5):449-455.
- 296. Page G. William, and Harvey Rabinowitz. 1993 Groundwater contamination: its effects on property values and cities. *Journal of the American Planning Association*, v59 n4 p473(9)
- 297. Parameswaran, Menon. 1999. Urban wastewater use in plant biomass production, *Resources, Conservation and Recycling*, Volume 27, Issues 1-2, *Pp...*39-56
- 298. Pearce, D., and K. Turner. 1990. Economics of Natural Resources and the Environment. Harvester Wheatshaf, London.
- 299. Pearson, G. A. 1972. Suitability of food processing waste-water for irrigation. *Journal of Environmental Quality*. Vol. 1, pp. 394-397.
- 300. Pelmulder, S. D., W. W-G. Yeh, and W. E. Kastenberg. 1996. Regional scale framework for modelling water resources and health risk problems. *Water Resources Research*. Vol. 32, No. 6, pp. 1851-1861.
- 301. Peralta, R. C., M. A. Hegazy, and G. R. Musharrafeih. 1994. Preventing pesticide contamination of groundwater while maximising irrigated crop yields. *Water Resources Research*. Vol. 30, No. 11, pp. 3183-3193.
- 302. Perry, C. J. 1996. Alternative Approaches to Cost Sharing for Water Service to Agriculture in Egypt. **IWMI Research Report No. 2**. International Water Management Institute, Colombo, Sri Lanka.

- 303. Pethig, Rudiger and Klaus Fiedler. 1989. Effluent Charges on Municipal Wastewater Treatment Facilities: In Search of Their Theoretical Rationale. *Journal of Economics*-Zeitschrift fur Nationalokonomie. Vol. 49 (1). p 71-94.
- 304. Pethig, Rudiger. 1989. Efficiency versus Self-financing in Water Quality Management.. *Journal of Public Economics*. Vol. 38 (1). p 75-93.
- 305. Pettygrove G. S., and T. Asano (eds). 1985. Irrigation with reclaimed municipal wastewater a guidance manual. 1985, Chelsea, Mich: Lewise Publishers, Inc.
- 306. Phaneuf Daniel J., Catherine L. Kling, and Joseph A. Herriges. 1998. Valuing water quality improvements using revealed preference methods when corner solutions are present. (Valuing the Effects of Water Quality on Recreational Resources) *American Journal of Agricultural Economics*, v80 i5 p1025(7)
- 307. Piper S. and W. E. Martin. 1997. Household willingness to pay for improved rural water supply. *Water Resources Research*. Vol. 33, No. 9, pp. 2153-2163.
- 308. Quanrud David M., Robert G. Arnold, L. Gray Wilson and Martha H. Conklin. 1996. Effect of soil type on water quality improvement during soil aquifer treatment, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 419-431
- 309. Ramjeawon T., J. Baguant. 1995. Evaluation of Critical BOD Loadings from Mauritian Sugar Factories to Streams and Standards Setting. *Journal of Environmental Management*, Vol. 45, No. 2, pp. 163-176
- 310. Randall., A. (1986) 'The Possibility of Satisfactory Benefit Estimation with Contingent Markets', in R. Cummings, D. Brookshire, and W. Schulz (eds.) Valuing Public Goods: An Assessment of the Contingent Valuation Method, Totowa, NJ: Rowan and Allanheld.
- 311. Rashed M., S. R. Awad, M. A. Salam and E. Smidt. 1995. Monitoring of groundwater in Gabal el Asfar wastewater irrigated area (Greater Cairo). *Water Science and Technology*. Vol. 32, No. 11, Pp. 163-169.
- 312. Ray Isha, Jeffrey Williams. 1999. Evaluation of price policy in the presence of water theft. *American Journal of Agricultural Economics*, v81 i4 p928(1)
- 313. Ready Richard C., and Kimberley Henken. 1999. Optimal self-protection from nitrate-contaminated groundwater. *American Journal of Agricultural Economics*, v81 i2 p321(1)
- 314. Ready, Mark J., and Richard C. Ready. 1995. Optimal Pricing of Depletable, Replaceable Resources: The Case of Landfill Tipping Fees. *Journal of Environmental Economics and Management*, 28, pp. 307-323
- 315. Reboll, V., M. Cerezo, A. Roig, V. Flors, L. Lapena, and P. Garcia-Agustin. 1999. Influence of wastewater vs groundwater on young Citrus trees. *Journal of the Science of Food and Agriculture*. 80(10):1441-1446.
- 316. Redding, T., S Todd, and A. Midlen. 1997. The Treatment of Aquaculture Wastewaters-A Botanical Approach. *Journal of Environmental Management*, Vol. 50, No. 3, pp. 283-299

- 317. Reed Sherwood, Susan Parten, Gary Matzen and Randy Pohren. 1996. Water reuse for sludge management and wetland habitat, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 213-219
- 318. Reed, Krista S. and C. Edwin Young. 1983. Impact of Regulatory Delays on the Cost of Wastewater Treatment Plants.. *Land Economics*. Vol. 59 (1). p 35-42.
- 319. Renzetti Steven. 1992. Estimating the structure of industrial water demands: the case of Canadian manufacturing. *Land Economics*, v68 n4 p396(9)
- 320. Ribaudo Marc O., C. Tim Osborn, and Kazim Konyar. 1994. Land retirement as a tool for reducing agricultural nonpoint source pollution. *Land Economics*, v70 n1 p77(11)
- 321. Ribaudo Marc, and Peter Kuch. 1999. The clean water action plan: new directions or going in circles? *American Journal of Agricultural Economics*, v81 i5 p1205
- 322. Ribaudo, O. Marc. 1992. Options for agricultural nonpoint-source pollution control. *Journal of Soil and Water Conservation*, v47, n1, p42(4).
- 323. Rimawi, O., E. Salameh, and A. El-Naqa. 1999. Chemical changes of yeast industry wastewater during infiltration in Ruseifa area, Jordan. *Hydrological Sciences Journal*-Journal des Sciences Hydrologiques. 44(5):799-810.
- 324. Risser, P. G. 1985. Towards a holistic management perspective. BioScience. Vol. 33, No. 7, pp. 414-418
- 325. Rivera, Daniel. 1996. Private sector participation in the water supply and wastewater sector: Lessons from six developing countries. *Directions in Development series*. Washington, D.C.: World Bank. p xiii, 83. 1996.
- 326. Rogers, P., C. Hurst, and N. Harshadeep. 1993. Water resources planning in a strategic context: Linking the water sector to the national economy. *Water Resources Research*. Vol. 29, No. 7, pp. 1895-1906.
- 327. Rogers, Robert P. and Kenneth Rubin. 1985. Management of Water Resources in the United States: Current Context and Future Strategies. Harvard John F. Kennedy School of Government, Discussion Paper: 141D. p 34. November 1985.
- 328. Rose, Marshall. 1976. A Note on Cost Sharing of Municipal Wastewater Pollution Abatement Projects.. *Land Economics*. Vol. 52 (4). p 554-58. Nov. 1976.
- 329. Rosen, M. D., and R. J. Sexton. 1993. Irrigation districts and water markets: an application of cooperative decision-making theory. *Land Economics*. Vol. 69, No. 1, pp. 39-53.
- 330. Rosenqvist H., P. Aronsson, K. Hasselgren and K. Perttu. 1997. Economics of using municipal wastewater irrigation of willow coppice crops, *Biomass and Bioenergy*, Volume 12, Issue 1, *Pp...*1-8

- 331. Rowe, R. D., R. C. d'Arge, and D. S. Brookshire. 1980. An experiment on the economic value of visibility. *Journal of Environmental Economics and Management*, 7, pp. 1-19
- 332. Rowe, R., R. d'Arge and D. Brookshire (1980) 'An Experiment on the Economic Value of Visibility', *Journal of Environmental Economics and Management*, 7: 1-19.
- 333. Rozelle, S., Xiaoying Ma. and Leonard Ortolano. 1993. Industrial Wastewater Control in Chinese Cities: Determinants of Success in Environmental Policy. *Natural Resource Modeling*. Vol. 7 (4). p 353-78.
- 334. Rozzi, A., F. Malpei, L. Bonomo and R. Bianchi. 1999. Textile wastewater reuse in northern Italy (COMO). *Water Science and Technology*. Vol. 39, No. 5, Pp. 121-128
- 335. Samples, K. J. Dixon, and M. Goven (1986) 'Information Disclosure and Endangered Species Valuation', *Land Economics*, 62(3): 306-312.
- 336. Sanchirico, J., A. Krupnick, and J. Shih. 2000. An integrated analysis of market based instruments for pollution reduction and land use: Are there economies of scope? Project summary, Resources for the Future, Washington, DC. http://www.rff.org/proj_summaries/...chirico_99_nonpoint_pollution.htm, Accessed October.
- 337. Santarsiero Anna, Enrico Veschetti, and Massimo Ottaviani. 1996. Elements in Wastewater for Agricultural Use. *Microchemical Journal*, Vol. 54, No. 4, pp. 338-347
- 338. Schecter, M. and A. M. Freeman (1992) Some Reflections on the Definition and Measurement of Non-use Values, Natural Resources and the Environment Research Center and Department of Economics, University of Haifa, June
- 339. Schleich, J., D. White, and K. Stephenson. 1996. Cost implications in achieving alternative water quality targets. *Water Resources Research*. Vol. 32, No. 9, pp. 2879-2884.
- 340. Schuhmann Peter W., and J. E. Easley Jr. 1998. Stock dynamics and recreational fishing welfare estimation: implications for natural resource damage assessment. (Valuing the Effects of Water Quality on Recreational Resources) *American Journal of Agricultural Economics*, v80 i5 p1032(6)
- 341. Schut, J. 1995. Twenty-five years of waste water management in the Netherlands an industrial view. *Water Science and Technology*. Vol. 32, No. 11, Pp. 33-38
- 342. Schut, J. 1995. Twenty-five years of waste water management in the Netherlands an industrial view. *Water Science and Technology*. Vol. 32 ,No.11, Pp. 33-38
- 343. Schwarz, G. E. and V. D. McConnell. 1993. Local choice and wastewater treatment plant performance. *Water Resources Research*. Vol. 29, No. 6, pp. 1589-1600.
- 344. Scott, C. A., J. A. Zarazua, and G. Levine. 2000. Urban-Wastewater Reuse for Crop Production in the Water-Short Guanajuato River Basin, Mexico. **IWMI**

- **Research Report No. 41**. International Water Management Institute, Colombo, Sri Lanka.
- 345. Scott, P., C E. Miller and Chris Wood. 1998. Planning and Pollution: An Unusual Perspective on Central-Local Relations. *Environment and Planning* C-Government and Policy. Vol. 16 (5). p 529-42. October 1998.
- 346. Seckler, D. 1996. The New Era of Water Resources Management: From "Dry" to "Wet" Water Savings. **IWMI Research Report No. 1.** International Water Management Institute, Colombo, Sri Lanka.
- 347. Segarra Eduardo, M. Ragy Darwish and Don E. Ethridge. 1996. Returns to municipalities from integrating crop production with wastewater disposal, *Resources, Conservation and Recycling*, Volume 17, Issue 2, Pp. 97-107
- 348. Segerson, K. 1990. Liability for groundwater contamination from pesticides. *Journal of Environmental Economics and Management*. 19, pp. 227-243
- 349. Seip, K. and Strand, J. (1990) Willingness to Pay for Environmental Goods in Norway: A Contingent Valuation Study with Real Payment, Memo. 12, Dept. of Economics, University of Oslo.
- 350. Shahalam, A., B. M. Abuzahra, and A. Jaradat. 1998. Wastewater irrigation effect on soil, crop and environment a pilot scale study at Irbid, Jordan. *Water, Air, and Soil Pollution.* 106(3-4):425-445.
- 351. Shatanawi, M., and M. Fayyad. 1996. Effect of Khirbet As-Samra treated effluent on the quality of irrigation water in the central Jordan valley. *Water Research*. 30(12):2915-2920.
- 352. Shaw, W. D. 1996. Problems with estimating the economic impacts of averting climate change: A look at water resources. *Water Resources Research*. Vol. 32, No. 7, pp. 2251-2257.
- 353. Shelef Gedaliah and Yossi Azov. 1996. The coming era of intensive wastewater reuse in the Mediterranean region, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 115-125
- 354. Shereif, M. M., M. El-S. Easa, M. I. El-Samra and K. H. Mancy. 1995. A demonstration of wastewater treatment for reuse applications in fish production and irrigation in Suez, Egypt. *Water Science and Technology*. Vol. 32, No. 11, Pp. 137-144
- 355. Shuval H. I., A. Adin, B. Fattal, E. Rawitz and P. Yekutiel. 1986. Wastewater irrigation in developing countries: health effects and technical solutions. Technical Paper No. 51. The World Bank, Washington DC
- 356. Shuval H. I.. 1990., A. Adin, B. Fattal, E. Rawitz and P. Yekutiel. 1986. Wastewater irrigation in developing countries: health and technical solutions. Summary of World Bank Technical Paper No. 51. The World Bank, Washington DC
- 357. Shuval, H. I. 2000. Are the conflicts between Israel and her neighbours over the waters of the Jordan river basin an obstacle to

- peace? Israel-Syria as a case study. Water, Air, and Soil Pollution. Vol. 1 23, No. 1/4, pp. 605-630.
- 358. Shuval, H., Y. Lampert and B. Fattal. 1997. Development of a risk assessment approach for evaluating wastewater reuse standards for agriculture. *Water Science and Technology*. Vol. 53, No. 11-12, pp. 15-20
- 359. Sidle, R. C., J. E. Hook, and L. T. Kardos. 1976. Heavy metal application and plant uptake in a land disposal system for wastewater. *Journal of Environmental Quality*. Vol. 5, No. 1, pp. 97-102.
- 360. Siebe, C., and W. R. Fischer. 1996. Effect of long-term irrigation with untreated sewage effluents on soil properties and heavy metal adsorption of leptosols and vertisols in central Mexico. *Zeitschrift fur Pflanzenernahrung und Bodenkunde*. 159(4):357-364, [Abstract].
- 361. Sigman Hilary. 1996. The Effects of Hazardous Waste Taxes on Waste Generation and Disposal. *Journal of Environmental Economics and Management*, 30, pp. 199-217
- 362. Simpson, J. M. 1999. Changing community attitudes to potable re-use in south-east Queensland. *Water Science and Technology*. Vo. 40, No. 4-5, Pp. 59-66
- 363. Singh, B., R. Ramasubban, R. Bhatia, J. Briscoe, C. C. Griffin, and C. Kim. 1993. Rural water supply in Kerala, India: How to emerge from a low-level equilibrium trap. *Water Resources Research*. Vol. 29, No. 7, pp. 1931-1942.
- 364. Singh, K. K. and L. C. Mishra. 1987. Effect of fertilizer factory effluent on soil and crop productivity. *Water, Air and Soil Pollution*. Vol. 33, pp. 309-320.
- 365. Skillicorn, Paul, William Spira, and William Journey. 1993. Duckweed aquaculture: A new aquatic farming system for developing countries. Washington, D.C.: World Bank. p x, 76.
- 366. Smeers, Yves and Daniel Tyteca. 1980. Optimisation economique et fiabilite des reseaux intercommunaux de stations d'epuration. (Economic Optimization and Reliability of Regional Wastewater Treatment Plant Networks. (English summary). *Annals of Public and Cooperative Economics*. Vol. 51 (1-2). p 69-95.
- 367. Smith, G. H. S., A. P. Nicholas, and R. I. Ferguson. 1997. Measuring and defining biomodal sediments: Problems and implications. *Water Resources Research*. Vol. 33, No. 5, pp. 1178-1185.
- 368. Smith, R. A., G. E. Schwarz, and R. B. Alexender. 1997. Regional interpretation of water-quality data. *Water Resources Research*. Vol. 32, No. 12, pp. 2781-2798.
- 369. Smith, V. H., G. D. Tilman, and J. C. Nekola. 1999. Eutrophication: impacts of excess nutrient inputs on freshwater, marine, and terrestrial ecosystems. *Environmental Pollution*. Vol. 100, pp. 179-196. www.elsevier.com/locate/envpol>

- 370. Somlyody, Laszlo and Peter Shanahan. 1998. Municipal wastewater treatment in Central and Eastern Europe: Present situation and cost-effective development strategies. Washington, D.C.: World Bank. p xvi, 145.
- 371. Steenbergen van Frank. 1995. The frontier problem in incipient groundwater management regimes in Balochistan (Pakistan). *Human Ecology: An Interdisciplinary Journal*, v23 n1 p53(22)
- 372. Stephenson Kurt, Patricia Norris, and Leonard Shabman. 1998. Watershed-base effluent trading: the non point source challenge. *Contemporary Economic Policy*, v16 n4 p412(10).
- 373. Stevens, T. H., T. A. More, and R. J. Glass (1994), 'Interpretation and Intertemporal Stability of CV Bids for Wilderness Existence: A Panel Study', *Land Economics* 70(3): 355-363.
- 374. Stoll, U., and H. Gupta. 1997. Management strategies for oil and grease residues. *Waste Management & Research*, 15, pp. 23-32.
- 375. Streck, T., and J. Richter. 1997. Heavy metal displacement in a sandy soil at the Field scale .2. Modeling. *Journal of Environmental Quality*. 26(1):56-62.
- 376. Stuthridge Trevor, Kaj Mattsson, Jarl Hemming, Georg E. Carlberg. 1998. Experimental Field Exposure of Brown Trout to River Water Receiving Effluent from an Integrated Newsprint Mill. *Ecotoxicology and Environmental Safety*, Vol. 40, No. 3, pp. 184-193
- 377. Sun G., K. R. Gray, and A. J. Biddlestone. 1998. Treatment of Agricultural Wastewater in Downflow Reed Beds: Experimental Trials and Mathematical Model. *Journal of Agricultural Engineering Research*, Vol. 69, No. 1, pp. 63-71
- 378. Swierzbinski Joseph E. 1994. Guilty until Proven Innocent-Regulation with Costly and Limited Enforcement. *Journal of Environmental Economics and Management*, Vol. 27, N. 2, pp. 127-146
- 379. Syme, G. J. and B. E. Nancarrow. 1996. Planning attitudes, lay philosophies, and water allocation: A preliminary analysis and research agenda. *Water Resources Research*. Vol. 32, No. 6, pp. 1843-1850.
- 380. Syme, G. J. and B. E. Nancarrow. 1997. The determinants of perception of fairness in the allocation of water to multiple uses. *Water Resources Research*. Vol. 33, No. 9, pp. 2143-2152.
- 381. Tanik Aysegul, Hasan Zuhuri Sarikaya, Veysel Eroglu, Derin Orhon and Izzet Oztürk. 1996. Potential for reuse of treated effluent in Istanbul, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 107-113
- 382. Tanik, A., and B. Çomakoglu. 1996. Nutrient removal from domestic wastewater by rapid infiltration system. *Journal of Arid Environments*, Vol. 34, No. 3, pp. 379-390
- 383. Tawil Natalie. 1999. Flow Control and Rent Capture in Solid Waste Management. *Journal of Environmental Economics and Management*, Vol. 37, No. 2, pp. 183-201.

- 384. Tchobanoglous George and Andreas N. Angelakis. 1996. Technologies for wastewater treatment appropriate for reuse: potential for applications in Greece. *Water Science and Technology*, Vol. 33, No. 10-11, pp. 15-24
- 385. Teinen, J. T. 1995. A review of, and research suggestions for , solid-waste management issues: the predicted role of incentives in promoting conservation behaviour. *Environmental Conseraction*, v22, n2.
- 386. Terras, C., P. Vandevivere and W. Verstraete. 1999. Optimal treatment and rational reuse of water in textile industry. *Water Science and Technology*. Vol. 39, No. 5. Pp. 81-88
- 387. *The Lancet*. 1990. Use of sewage and sludge in agriculture. (editorial), Mar 17, v335, n8690, p635(2).
- 388. The United States Environmental Protection Agency. 1998. Land treatment of municipal waste water: process design manual. USEPA publication number: 14.625 181 013. USEPA, Washington, DC. http://www.epa.gov/cgibin/claritgw Accesses November 2000.
- 389. The United States Environmental Protection Agency. 1998. Preliminary risk assessment for parasites in municipal sewage sludge applied to land.. USEPA publication number: 3.600 691 001. USEPA, Washington, DC. http://www.epa.gov/cgi-bin/claritgw Accesses November 2000.
- 390. The United States Environmental Protection Agency. 1998. Preliminary risk assessment for viruses in municipal sewage sludge applied to land.. USEPA publication number: 4.600 R92 064. USEPA, Washington, DC. http://www.epa.gov/cgi-bin/claritgw Accesses November 2000.
- 391. The United States Environmental Protection Agency. 1998. Water recycling and reuse: the environmental benefits. USEPA publication number: EPA 909-F-98-001. USEPA, Washington, DC. http://www.epa.gov/region9/water/recycling/index.html> Accessed November 2000.
- 392. The World Bank. The economics of project analysis: a practioner's guide. Wrad......, Deren....., D. Silva. 199----. World Bank, Washington DC.
- 393. The World Bank. 1986. Wastewater irrigation in developing countries: health effects and technical solutions. Shuval H. I., A. Adin, B. Fattal, E. Rawitz and P. Yekutiel. Technical Paper No. 51. The World Bank, Washington DC.
- 394. The World Bank. 1994. *Environmental Assessment Source Book* (1994) (Electronic Vesrion). The World Bank, Washington, DC.
- 395. The World Bank. 1994. *Environmental Assessment Source Book* (1994) (Electronic Vesrion). The World Bank, Washington, DC.
- 396. The World Bank. 2000. Urban water and sanitation: Wastewater re-use. The World Bank, Washington, DC. http://wbln0018.worldbank.org/mna/..9eld685256949006f73e4?opendocument> Accessed October 2000.

- 397. Thomas Alban.1995. Regulating Pollution under Asymmetric Information: The Case of Industrial Wastewater Treatment. *Journal of Environmental Economics and Management*, Vol. 28, No. 3, pp. 357-373
- 398. Thompson, R. G. and F. D. Singelton, Jr. 1986. Wastewater treatment costs and outlays in organic petrochemicals: standards versus taxes with methodology suggestions for marginal cost pricing and analysis. *Water Resources Research*. Vol. 22, No. 4, pp. 467-474.
- 399. Tsagarakis, K. and A N. Angelakis. 1998. Evaluation of Domestic Wastewater Treatment Plants with Emphasis on the Disposal of Treated Effluent and Sludge. *East-West Series in Economics, Business, and the Environment*. Vol. 1 (2). p 85-93.
- 400. Tselentis Yiannis and Stella Alexopoulou. 1996. Effluent reuse options in Athens metropolitan area: A case study, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 127-138
- 401. Tsur, Y., and T. Gtaham-Tomasi. 1991. The buffer value of groundwater with stochastic surface water supplies. *Journal of Environmental Economics and Management*, 21, pp. 201-224.
- 402. USEPA, 1992. Manual Guidelines for Water Reuse. EPA 625/R-92/004, Washington, DC. (Technical Report 81, Sep 1992), pp. 252.
- 403. USEPA/USAID, 1992. Guidelines for Water Reuse. USEPA, Washington DC. (Technical Report 81, Sep 1992), pp. 252.
- 404. VanDerslice J. and J. Briscoe. 1993. All Coliforms are not created equal: A comparison of the effects of water source and in-house water contamination on infantile diarrheal disease. *Water Resources Research*. Vol. 29, No. 7, pp.1983-1995.
- 405. van-Vauuren, W., J. C., Giraldez, D. P., Stenhouse. 1997. The social returns of agricultural practices for promoting water quality improvements. *Canadian Journal of Agricultural Economics*. Vo. 45, No. 3, pp. 219-243.
- 406. Varian, H. R. *Microeconomic Analysis*, 1992, third edition, W. W. Norton & Company, NY, USA.
- 407. Varian, H. R. (1992) *Microeconomic Analysis*, third edition, W. W. Norton & Company, NY, USA.
- 408. Varian, H. R. 1992. *Microeconomic Analysis*, third edition, W. W. Norton & Company, NY, USA.
- 409. Vazquez-Montiel Oscar, Nigel J. Horan and Duncan D. Mara. 1996. Management of domestic wastewater for reuse in irrigation, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 355-362
- 410. Vazquez-Montiel, O., J. Gardea-Torresdey and J. VanDerslice. 1999. Dilution effects on the quality of untreated wastewater used for irrigation along the USA-Mexico border. *International Journal of Environmental Health Research*. 9(2):125-129.

- 411. Vickner Steven S., Dana L. Hoag, W. Marshall Frasier, and James C. Ascough II. 1998. A dynamic economic analysis of nitrate leaching in corn production under nonuniform irrigation conditions. *American Journal of Agricultural Economics*, May 1998 v80 n2 p397(12)
- 412. Vidal, M., J. Melgar, A. Lopez, and M. C. Santoalla. 2000. Spatial and temporal hydrochemical changes in groundwater under the contaminating effects of fertilizers and wastewater. *Journal of Environmental Management*, 60, pp. 215-225.
- 413. Wahaab, R. Abdel, H. J. Lubberding and G. J. Alaerts. 1995. Copper and chromium (III) uptake by duckweed. *Water Science and Technology*. Vol. 32, No. 11, Pp. 105-110
- 414. Ward, F. A., and T. P. Lynch. 1997. Is dominant use management compatible with basin-wide economic efficiency. *Water Resources Research*. Vol. 33, No. 5, pp. 1165-1170.
- 415. Weber, B., Y. Avnimelech, and M. Juanico. 1996. Salt enrichment of municipal sewage new prevention approaches in Israel. *Environmental Management*. 20(4):487-495.
- 416. Wei Meng-Shiun, and Frederick Weber. 1996. An Expert System for Waste Management. *Journal of Environmental Management*, Vol. 46, No. 4, pp. 345-358
- 417. Wetzstein, M. E., and T. J. Centner. 1992. Regulating agricultural contamination of ground water through strict liability and negligence legislation. *Journal of Environmental Economics and Management*, 22, pp. 1-11
- 418. Whitehead, J. and G. Blomquist, (1991) Measuring the Contingent Values for Wetlands: Effects of Information about Related Goods, Water Resource Research 27: 2523-2531.
- 419. Wijesinghe Bandupala, Ralph B. Kaye and Cristopher Jospeh D. Fell. 1996. Reuse of treated sewage effluent for cooling water make up: a feasibility study and a pilot plant study, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 363-369
- 420. Willers, H. C., X. N. Karamanlis, and D. D. Schulte. 1999. Potential of closed water systems on dairy farms, [Review]. *Water Science and Technology*. 39(5):113-119.
- 421. Willig, R. D. (1976) 'Consumer's Surplus Without Apology', *The American Economic Review*, 66(4): 587-597.
- 422. Willig, R. D. 1976. Consumer's Surplus Without Apology', *The American Economic Review*, 66(4): 587-597
- 423. World Health Organization. 1989. Guidelines for the use of wastewater and excreta in agriculture and acquaculture: measures for public helath protection (Executive Summary), WHO Technical Reporting Service, Rome, Italy.

- 424. Wu JunJie, and Bruce A. Babcock. 1999. The Relative Efficiency of Voluntary vs mandatory Environmental Regulations. *Journal of Environmental Economics and Management*. 38, pp. 158-17.
- 425. Wu, J., M. L. Taegue, H. P. Mapp, and D. J. Bernardo. 1995. An empirical analysis of the relative efficiency of policy instruments to reduce nitrate water pollution in the U.S Southern High Plains. *Canadain Journal of Agricultural Economics*, 43, pp. 403-420
- 426. Wu, L., J. Q. Chen, P. Vanmantgem, and M. A. Harivandi. 1996. Regenerant wastewater irrigation and ion uptake in five turfgrass species. *Journal of Plant Nutrition*. 19(12):1511-1530.
- 427. Yadav Satya N. 1997. Dynamic optimization of nitrogen use when groundwater contamination is internalized at the standard in the long run. *American Journal of Agricultural Economics*, v79 n3 p931(15)
- 428. Yagoubi, M., A. Foutlane, L. Bourchich, J. Jellal, C. Wittland, and M. El Yachioui. Study on the performance of the wastewater stabilisation pond of Boujaad, Morocco, *Aqua* (Oxford). 49(4):203-209.
- 429. Young, C. E., and D. J. Epp. 1980. Land treatment of municipal wastewater in small communities. *American Journal of Agricultural Economics*. Vo. 62, No. 2, pp. 238-243,
- 430. Young, D., and S. Aidun. 1993. Ozone and wheat farming in Alberta: a microstudy of the effects of environmental change. *Canadian Journal of Agricultural Economics*, 41, pp. 27-43.
- 431. Zongwu Tang, Li Guihua, Larry W. Mays and Peter Fox. 1996. Development of methodology for the optimal operation of soil aquifer treatment systems, *Water Science and Technology*, Vol. 33, No. 10-11, pp. 433-442

End of Document