



DAFTAR PUSTAKA

- Abay, C., B. Miran., and C. Gundem,. 2004. An Analysis of Input Use Efficiency in Tobacco Production Respect to Sustainability. The Case Study of Turkey. *Journal of Sustainable Agriculture* 24(3), 123-143.
- Abdurrahman, 2005. Rangkuman Bahasan Lahan Kering di Indonesia. Dalam Teknologi Pengelolaan Lahan Kering Menuju Pertanian Produktif Ramah Lingkungan. Pusat Penelitian dan Pengembangan Tanah dan Agroklimat.
- Abedullah, K.B and B. Ahmad, 2006. Technical Efficiency and its Determinants in Potato Production, Evidence from Punjab, Pakistan. *The Lahore Journal of Economics* 11 : 2 (Winter 2006) pp 1-22
- Abedullah, S. Kouser and K. Mushtaq, 2010. Environmental Efficiency Analysis of Basmati Rice Production in Punjab, Pakistan: Implications for Sustainable Agricultural Development. *The Pakistan Development Review*, Vol. 49, No. 1 (Spring 2010), pp. 57-72
- Acharya, S.S. 2006. Sustainable Agriculture and Rural Livelihoods. *Agricultural Economics Research Review* Vol. 19 July-December 2006 pp 205-217
- Adar, D. 2011. keragaan Usahatani dan Efisiensi Produksi Jeruk Keprok Soe Berdasarkan Zona Agroklimat di Provinsi Nusa Tenggara Timur. Fakultas Pasca sarjana, Institut Pertanian Bogor. Disertasi tidak dipublikasikan.
- Adiyoga, W. 1999. Beberapa Alternatif Pendekatan untuk Mengukur Efisiensi atau In-Efisiensi dalam Usahatani. *Informatika Pertanian* Volume 8 (Desember 1999)
- , R. Suherman, N. Gunadi, dan A. Hidayat. 2004. Aspek Nonteknis dan Indikator Efisiensi Sistem Pertanaman Tumpangsari Sayuran Dataran Tinggi. *J. Hort.* 14(3):217-227, 2004
- ADVANCE. 2006. Sustainable Value of European Industry: a Value-based Analysis of the Environmental Performance of European Manufacturing Companies. Technical report, Fullversion Report (<http://www.advanceproject.org>).
- Afriat, S. N. 1972. Efficiency Estimation of Production Function. *Int. Economic Review* 13 (3). pp. 558-568.
- Ahmad, M., GM. Chaudhry, and M. Iqbal. 2002. Wheat Productivity, Efficiency, and Sustainability: A Stochastic Production Frontier Analysis. *The Pakistan Development Review* 41:4 Part II (Winter, 2002) pp 643-663
- Aigner, C. D., K. Lovell, and P. Schmidt. 1977. Formulation and Estimation Stochastic Frontier Production Function Model. *Journal of Economics* 6. pp. 21 – 37.
- _____, , and S. F. Chu. 1968. On Estimation The Industry Production Function. *American Economics Review* 58 (4). pp 826 – 839.
- Ali, M. and J. Flinn, Profit efficiency among basmati rice producers in Pakistan Punjab. *American Journal of Agricultural Economics*, Vol. 71, (1987) pp.303–310.
- Ali, M. and M.A. Chaudhry, 1990. Inter-regional Farm Efficiency in Pakistan's Punjab: A Frontier Production Function Study. *Journal of Agricultural Economics* 41:62-74.



- Alvarez, A., C. Arias. 2004. Technical Efficiency and Farm Size: A Conditional Analysis. *Agricultural Economics* 30 (2004) 241- 250.
- Amaza, P. S, Y. Billa, and A. C. Iheanacho. 2006. Identification of Factors that Influence Technical Efficiency of Food Crop Production in West Africa: Empirical Evidence from Borno State, Nigeria. *Journal of Agriculture and Rural Development in the Tropics and Subtropics* Volume 107, No. 2, 2006, pages 139 – 147.
- Amos T.T. 2007. An Analysis of productivity and Technical Efficiency of Smallholder Cocoa Farmers in Nigeria. *Journal of Social Science*, 15(2): 127-133
- Asadullah, M.N dan S. Rahman. 2005. Farm Productivity and Efficiency in Rural Bangladesh: the role of Education revisited. CSAE WPS/2005-10
- Atkinson, G. 2000, Measuring Corporate Sustainability. *Journal of Environmental Planning and Management* 43(2), 235-252
- Atkinson, G., T. Hett, and J. Newcombe. 2000. Measuring 'Corporate Sustainability'. CSERGE Working Paper GEC 99-01.
- Awudu, A., and R. Eberlin. 2001. Technical efficiency during economic reform in Nicaragua: evidence from farm household survey data. *Economic Systems*, 15(25), 113-125. [http://dx.doi.org/10.1016/s0939-3625\(01\)00010-3](http://dx.doi.org/10.1016/s0939-3625(01)00010-3)
- Ayaz, S., Z. Hussain, and M.B. Hussain Sial. 2010. Role of Credit on Production Efficiency of Farming Sector in Pakistan (A. Data Employment Analysis). *World Academy of Science Enginering and Technology* 66, 240.
- Bakhsh, K.A, and B. Ahmad. 2006. Technical Efficiency and Its Determinant in Potato Production, Evidence from Punjab, Pakistan. *The Lahor Journal of Economics* 11:2 (Winter 2006) pp 1-22.
- Bakhsh, K., and S. Hassan. 2008. Relationship between Technical Efficiency and Managerial Ability Evidence from Punjab, Pakistan. <http://www.wbiconpro.com/Management/411-Bakhsh,L %20&%20 Hassan ,S. pdf>
- Bakhshoodesh, M, and K. J. Thomson. 2001. Input and Output Technical Efficiencies of Wheat Production in Kerman, Iran. *Agricultural Economics* 24 (2001) 307 – 313.
- Basnayake, B. M. J. K., and L. H. P. Gunaratne. 2002. 'Estimation of Technical Efficiency and It's Determinants in the Tea Small Holding Sector in the Mid Country Wet Zone of Sri Lanka', *Sri Lanka Journal of Agricultural Economics* 4: 137-150.
- Battese, G. E. 1992. Frontier Production Function and Technical Efficiency: A Survey of Empirical Applications in Agricultural Economics. *Agricultural Economics*, 7 (1992) 185-208. Elsevier Science Publishers B. V., Amsterdam.
-
- dan T. J. Coelli. 1993. A Stochastic Frontier Production Function Incorporating A Model for Technical Inefficiency Effects. No. 69 –October 1993.
- Battese, G. and T. J. Coelli. 1995. A Model for Technical Inefficiency Effects in a Stochastic Frontier ProductionFunction for Panel Data. *Empirical Economics*, Vol. 20, (1995) pp. 325–332.



- Battesse, G.E., and G.S. Corra. 1977. Estimation on Production Frontier Model:With Application to the Pastoral Zone of Eastern Australia. *Australian Journal of Agricultural Economics*, 48(1977):169-179
- Beattie, B.R., and C.R. Taylor. (1985). *The Economics of Production*. New York: John Wiley & Sons
- Becker, B. 1997. Sustainability Assessment: A Review of Values, Concept and Methodological Approaches. *Issues in Agricultural 10*. The Consultative Group on International Agricultural research (CGIAR) Washington DC.
- Bernd, E. R.t and L. R. Christensen . 1973. The translog function and the substitution of equipment, structures, and labor in U.S. manufacturing 1929-68. *Journal of Econometrics*, 1973, vol. 1, issue 1, 81-113
- Binam, J., K .Sylla,, I. Diarra, and G. Nyambi, 2003. Factors Affecting Technical Efficiency among Coffee Farmers in Cote d'Ivoire: Evidence from the Centre West region. *African Development Review*, Vol. 15 (2003) pp.66-76
- Binam J., J.Tonye., W. Njankoua, G. Nyambi, M. Akoa. 2004. Factors Affecting the Technical Efficiency Among Smallholder Farmers in the Slash and Burn Agriculture Zone of Cameroon. *Food Policy* 29:531–545.
- Bozoglu and Ceyhan, V. 2007. Measuring the Technical Efficiency and Exploring the Inefficiency Determinant of Vegetable Farms in Samsung Province, Turkey. *Agric. Syst.* 94: 649-656
- BPS. 2013^a. Bantul Dalam Angka. BPS Kabupaten Bantul
- _____. 2013^b. Sleman Dalam Angka. BPS Kabupaten Sleman
- _____. 2013^c. *Statistik Indonesia*. BPS Jakarta.
- _____. 2013^d. Yogyakarta Dalam Angka. BPS D.I. Yogyakarta
- _____. 2013^e. Luas Panen, Produktifitas dan Produksi Tanaman Padi Indonesia. bps.go.id. akses tanggal 2 Februari 2014.
- Bravo-Ureta, B, E. and A. E. Pinheiro. 1993. Efficiency Analysis of Developing Country Agriculture: A Review of the Frontier Function Literature. *Agricultural and Resource Economics Review*, Vol. 22, (1993) pp. 88–101.
- _____. 1997. Technical, Economic, and Allocative Efficiency in Peasant Farming: Evidence from the Dominican Republic. *The Developing Economies*, XXXV-1 (March 1997): 48 – 67.
- _____, Sol.s, D., Cocchi, H. and Quiroga, R., 2006. 'The impact of Soil Conservation and Output Diversification on Farm Income in Central American Hillside Farming', *Agricultural Economics*, Vol. 35, (2006) pp. 267–276.
- _____, Sol.s, D., Moreira, V., Maripani, J., Thiam, A. and Rivas, T. 'Technical Efficiency in Farming: A Meta-Regression Analysis', *Journal of Productivity Analysis*, Vol. 27, (2007) pp. 57–72.
- Byiringiro, F. and T. Reardon, 'Farm Productivity in Rwanda: Effects of Farm Size, Erosion, and Soil Conservation Investments', *Agricultural Economics*, Vol. 15, (1996) pp. 127–136.
- Callens, I., D. Tyteca. 1999. Methods Towards Indicator of Sustainable Development for Firms A Productive Efficiency Perspective. *Ecological Economics* 28 (1999) 41-53.



- Castoldi dan Bechini, 2010. Integrated sustainability assessment of cropping systems with agro-ecological and economic indicators in northern Italy. *Europ. J. Agronomy* 32 (2010) 59–72
- Ceyhan, V. 2010. Assessing the Agricultural Sustainability of Conventional Farming System in Samsun Province of Turkey. *African Journal of Agricultural Research* Vol. 5(13), pp. 1572-1583, 4 July 2010. At <http://www.academicjournals.org/AJAR>
- Chavas, J., R. Petrie, and M. Roth, 2005. Farm Household Production Inefficiency in the Gambia: Resource constraints and market failures. *American Journal of Agricultural Economics*, Vol. 87, (2005) pp. 160–179.
- Christensen, L., D. Jorgenson, and L. Lau, 1973. Transcendental Logarithmic Production Frontiers. *Review of Economics and Statistics* 55 (1), 28-45.
- Choudhury, ATMA. and I.R Kennedy. 2005. Nitrogen Fertilizer Losses from Rice Soils and Control of Environmental Pollution Problems. *Communications in Soil Science and Plant Analysis*. 36: 1625-1639.
- Coelli, T., 1996. Frontier Version 4.1 : A Computer Program for Stochastic Frontier Production and Cost Function Estimation. Working Paper 96/7, CEPA, Departemen of Econometrics University of New England, Armidale, Australia.
- Coelli, T., D.S. Prasada Rao, and G. E. Battese. 1998. An Introduction to Efficiency and Productivity Analysis. Kluwer Academic Publisher, Boston.
- Coelli, T., D.S. Prasada Rao, C.J. O'Donnell, and G.E. Battese. 2005. An Introduction to Efficiency and Productivity Analysis. Second Edition. Kluwer Academic Publisher, Boston.
- Dantsis, T., C. Douma, Ch. Giourga , A. Loumou , E. A. Polychronaki . 2010. A Methodological Approach to Assess and Compare the Sustainability Level of Agricultural Plant Production Systems. *Ecological Indicators* 10 (2010) 256–263. Tersedia dalam www.elsevier.com/locate/ecolind
- Daryanto, H. K. S. 2000. Analysis of the Technical efficiency of Rice Production in West Java Province, Indonesia: A Stochastic Frontier Production Function Approach. School of Economics, University of New England, Australia.
- Debertin, D. L., 2012. *Agricultural Production Economics*. Second edition Mcmillan Publishing Company, New York.
- Deininger, K., R. Castagnini, and M. Gonzalez, 2004. Comparing Land Reform and Land Markets in Colombia: Impacts on Equity and Efficiency (World Bank Working Papers No. 3258, Washington, DC, 2004).
- De Koeijer, T.J., G. A. A. Wossink, P.C. Struik and J. A. Renkema . 2002. Measuring Agricultural Sustainability in Terms of Efficiency: the Case of Dutch Sugar Beet Growers. *Journal of Environmental Management* (2002) 66, : 9-17.
- De Koeijer, T.J., G. A. A. Wossink, Smit A, Janssens S., J. A. Renkema, and P.Struik. 2003. Assessment of the Quality of Farmers'Environment Management and Its Effects on Resource Use Efficiency: a Dutch Case Study. *Agric.Syst* 78: 85-103.
- De Prada, J. D., B. Bravo-Ureta, and F. Shah. 2003. Agricultural Productivity and Sustainability : Evidence from Low Input Farming in Argentina.



- Doll, J. P. and F. Orazem, 1984. *Production Economics: Theory with Applications*. John Wiley & Sons, New York.
- Dumanski, J., E. Terry., D. Byerlee., Ch. Pieri. 1998. Performance Indicators for Sustainable Agriculture (Discussion Note). The World Bank-Washinton DC
- Ekanayake S.A.B., and S.K.W. Jayasuriya. 1987. Measurement of Farm Specific Technical Efficiency: A Comparison of Methods. *Journal of Agricultural Economics*, 38 (1): 115-122.
- Erhman, M., and W. Kleinhanss. 2008. Review of Concept for Evaluation of Sustainable Agriculture in Germany and Comparison of Measurement Schemes for Farm Sustainability.
- Farmia, Asih. 2008. Development of Organic Rice Farming in a Rural Area,Bantul Regency, Yogyakarta Special Region Province, Indonesia. *Journal of Development in Sustainable Agriculture* 3: 135-148 (2008).
- Farrell, M. J. 1957. The Measurement of Productive Efficiency. *Journal of The Royal Statistical Society. Series A (general)*, Vol. 120, No. 3, (1957), pp. 253 – 290. Blackwell Publishing for the Royal Statistical Society. <http://www.jstor.org/stable/2343100>.
- Fauziyah, Elys. 2010. Pengaruh Perilaku Petani dalam Menghadapi Risiko Produksi terhadap Alokasi Input Usahatani Tembakau: Pendekatan Fungsi Produksi Frontir Stokastik. Disertasi Program Doktor. Sekolah Pascasarjana, Institut Pertanian Bogor.
- Figge,F., and T. Hahn. 2002. Methods Sustainable Value Added—Measuring Corporate Sustainable Performance beyond Eco-Efficiency.2nd revised edition. Luneburg: Centre for Sustainability Management.
- _____. 2004. Sustainable Value Added—Measuring Corporate Contributions to Sustainability Beyond Eco-efficiency. *Ecological Economics* 48 (2004) 173– 187
- _____. 2005. The Cost of Sustainability Capital and the Creation of Sustainable Value by Companies. *Journal of Industrial Ecology* Volume 9, Number 4. <http://mitpress.mit.edu/jie>.
- Forsund, F. R., and L. Hjalmarsson. 1979. Generalised Farell Measures of Efficiency: An Application to Milk Processing in Swedish Dairy Plants. *Economic Journal* 89(3) : 294-315.
- Gail.L, Cramer and Clarence W. Jensen, 1979. *Agricultural Economics & Agribusiness: An Introduction*. John Wiley & Sons. New York
- Gomes, E.G., Joao C. C. B., Geraldo da Silva e Souza, Lidia A. M., and Joao A. C. M. 2009. Efficiency and Sustainability Assessment for a Group of Farmers in the Brazilian Amazon. *Ann Oper Res* (2009) 169: 167–181.
- Gorton, M. and M. Davidova, 2004. Farm Productivity and Efficiency in the CEE Applicant Countries: a Synthesis of Results. *Agricultural Economics* 30(2004), 1:16.
- Greene, W. H. 1993. The Econometric Approach to Efficiency Analysis, in H. O. Fried, C. A. K. Lovell and S. S. Schidt (eds). *The Measurement of Productive Efficiency: Techniques and Applications*. Oxford University Press, New York : 68-119.



- Guo, H. and S. Marchand. 2012. The Environmental Efficiency of Organic Farming in Developing Countries: A Case Study From China. *Etudes et Documents* Page. 21.
- Hadi, S.T.B., dan Haryadi. 2005. Studi Komersialisasi Benih Padi Sawah Varietas Unggul. *Buletin Agronomi* (33) (1) 12 – 18 (2005).
- Hallam, D. and F. Machado. 1996. Efficiency Analysis with Panel Data: a Study of Portuguese Dairy Farm. *European Review on Agricultural Economics*, 12 (1) : 79-93.
- Hanley, N., S. Mourato and R. Wright. 2001. Choice Modelling approaches : a superior alternative for environmental valuation? *Journal of Economic Surveys*, 15(3).
- Hanley N., R. Wright and B. Alvarez-Farizo. 2006. Estimating the economic value of improvements in river ecology using choice experiments: an application to the water framework directive. *Journal of Environmental Management* 78 (2006) 183–193
- Harini, Rika, H.S. Yunus, Kasto dan Slamet Hartono. 2014. Analisis Spasial Sikap Petani dalam mempertahankan tanah pertanian di Kabupaten Sleman, Indonesia. *Malaysian Journal of Society and Space* 10 issue 2 (154 - 167)
- Hartoyo, Sri. 2003. Sustainable Agricultural Development in Java. Paper 2. International Workshop on Sustainable Agricultural Development in South Asia. Indonesia Institute of Science September 15-16, 2003. Jakarta Indonesia.
- Hasan, M. Kamrul, and S. M. Fakhrul Islam. 2010. Technical Inefficiency of Wheat Production in some Selected Areas of Bangladesh. *Bangladesh Journal Agril. Res.* 35(1): 101-112, March 2010.
- Herdt, R. and A. Mandac, 1981. Modern Technology and Economic Efficiency of Philippine Rice Farmers. *Economic Development and Cultural Change* 29, 375 - 399.
- Hermawan, Asep. 2005. *Penelitian Bisnis: Paradigma Kuantitatif*. PT. Grasindo. Jakarta
- Hitzhusen, F.J. 1993. Land Degradation and Sustainability of Agricultural Growth: Some Economic Concepts and Evidence from Selected Developing Countries. *Agricultural Ecosystem and Environment*, 46 (1993) 69-79. Elsevier Science Publishers B.V., Amsterdam
- Hosmer, D.W. and S. Lemeshow, 1989. *Applied Logistic Regression*, John Wiley and Sons Inc, Canada.
- Howarth, R.B. and R.B. Norgaard, 1990. Intergenerational Resource Rights, Efficiency and Social Optimality. *Land Economics* 66(1), 1-11.
- Husodo, S. 2004. Penilaian Ekonomi Lahan dan Keberlanjutan Usahatani di Kawasan Pinggiran Kota Yogyakarta. Ph.D Thesis Universitas Gadjah Mada Yogyakarta
- _____. 2005. Sikap Petani Terhadap Aktivitas Sektor Usahatani di Kawasan Peri Urban Yogyakarta. *Jurnal Ilmu-ilmu Pertanian* Vol. I No. I, Juli 2005 hal. 33-49.
- Illge L., T. Hahn., and F. Figge, 2008. Applying and Extending the Sustainable Value Method Related to Agriculture – an Overview . 12th Congress of the



- European Association of Agricultural Economists – EAAE 2008 Iraizoz, Belen, Manuel Rapu'n, Idoia Zabaleta. 2003. Assessing the Technical Efficiency of Horticultural Production in Navarra, Spain. Agricultural Systems 78 (2003) 387–403
- Jan P., M. Lips., A. Roesch., B. Lehmann., and M. Dumondel. 2008. Sustainable Value: an Application to Swiss Dairy Farms of the Mountainous Area. 12th Congress of the European Association of Agricultural Economists – EAAE 2008
- Javed, M.I., W. Khurshid., I. Hassan., A. Ali., and N. Nadeem. 2012. Impact of Institutional Credit and Extension Service on Productive Efficiency of Farms: Evidence from Irrigated Punjab, Pakistan. J.Agric. Res. 2012, 50(1). http://www.jar.com.pk/admin/upload/545_145p15.pdf
- Jondrow, J., C.A Knox Lovell, I.S. Materov, dan P. Schmidt. 1982. On The Estimation of Technical Inefficiency in the Stochastic Frontier production Function Model. Journal of Econometrics 19 (1982), 233-238. North Holland Publishing Company.
- Kalirajan, K. 1990. On Measuring Economic Efficiency. J Appl Economet 5:75–85
- Kalirajan, K. and J. Flin. 1983. The Measurement of Farm-specific Technical Efficiency. Pak J Applied Econ 2:167-180.
- Kalirajan, K. and R. Shand 1986. Estimating Location-specific and Firm-specific Technical Efficiency: An Analysis of Malaysian Agriculture. J Econ Develop 11:147-160.
- Kassie,M., P. Zikhali., J. Pender., and G. Köhlin. 2009b. Sustainable Agricultural Practices and Agricultural Productivity in Ethiopia Does Agroecology Matter? Environment for Development. Discussion Paper Series April 2009.
- Kim, Jong Moo. 2001. Efficiency Analysis of Sustainable and Conventional Farms in the Republic of Korea with Special Reference to the Data Envelopment Analysis (DEA). Journal of Sustainable Agriculture Vol 18 (4) 2001.
- Kleinbaum, D. G. 1994. *Logistic Regression : A Self-Learning Text*. New York : Springer-Verlag. 321p.
- Koutsoyiannis, A. 1977. Theory of Econometrics : An Introductory Exposition of Econometric Methods. Second Edition. The Macmillan Press Ltd, London.
- Kopp, J. and W. Diewert, 1982. The Decomposition of Frontier Cost Function Deviations into Measures of Technical and Allocative Efficiency. *Journal of Econometrics* 19, 319-331.
- Kumbhakar, S. and C. Lovell, 2000. Stochastic Frontier Analysis. Cambridge University Press.
- Kuosmanen, T., N. Kuosmanen. 2009a. The Role of Benchmark Technology in Sustainable Value Analysis an Application to Finnish Dairy Farms. Agricultural and Food Science Vol. 18 (2009): 302-316
- Kuosmanen, T., N. Kuosmanen. 2009b. How not to Measure Sustainable Value (and How One Might). Ecological Economics 69 (1999): 235 - 243 Case of the Philippine Uplands. Agricultural Economics 21(1999) 241-256.
- Kusnadi., Nunung., N. Tinaprilla., S.H. Susilowati, dan A. Purwoto. 2011. Analisis Efisiensi Usahatani Padi di Beberapa Sentra Produksi Padi di Indonesia. *Jurnal Agro Ekonomi*, 29(1), Mei 2011: 25-48.



- Lau, L.J. and P.A. Yotopoulos. 1971. A test for relative efficiency and applications to Indian Agriculture. *American Economic Review*.61:94-109.
- Lawn, P. 2006. Eco-efficiency Indicators Applied to Australia and Their Policy Relevance In: Sustainable Development Indicators in Ecological Economics edited by Lawn P., Edward Elgar, chapter 16, pp. 344{375.
- Lipsey, R.G., P. O. Steiner., and D. D. Purvis. 1987. *Economics*. Eight Edition. Harper dan Row Publishers. New York.
- Liu, Z., and J. Zhuang, 2000. Determinants of Technical Efficiency in Post-Collective Chinese Agriculture: Evidence from Farm-Level Data. *Journal of Comparative Economics* 28, 545-564.
- Lopez, F. 2008. Technical Efficiency in Portuguese Dairy Farms. Departement de Economia e Gestao, Universidade dos Acores Portugal.
- Lopez-Ridaura, S., O. Masera, and M. Astier. 2002. Evaluating the Sustainability of Complex Socio-Environmental System. The MEMSIS Framework. *Ecological Indicators* 2, 135-148.
- Lovell, C.A.K. 1993. Production frontiers and productive efficiency. The measurement of productive efficiency: Techniques and applications. Fried, H.O., A.A.K. Lovell and S.S. Schmidt (Eds.) Oxford University Press, New York, 3-67.
- Mamat H.S., S.R.P. Sitorus, H. Hardjomidjojo , dan A.K. Seta, 2006. Analisis Mutu, Produktivitas, Keberlanjutan Dan Arahan Pengembangan Usahatani Tembakau Di Kabupaten Temanggung, Jawa Tengah. *Jurnal Littri* Vol. 12 No. 4, Desember 2006 : 146 - 153
- McCullagh, P. and J.A Nelder. 1983. *Generalized Linear Models*, Chapman and Hall. London. Second Edition 1989
- Meeusen, W., and J.V.D. Broeck. 1977. Efficiency Estimation from Cobb-Douglas Production Function with Composed Error. *International Economic Review*, 18(June 1977) : 435-444.
- Merante, P., C. Pacini., S. Van Passel, and C. Vazzana. 2008 Application of the Sustainable Value Concept to a Representative Dairy Farm of Florence Province, Tuscany, under a Modelling Perspective. 12th Congress of the European Association of Agricultural Economists – EAAE 2008
- Meul, M., F. Nevensa., D. Reheulb., and G. Hofman. 2007. Energy use efficiency of specialised dairy, arable and pig farms in Flanders. *Agriculture, Ecosystems and Environment* 119 (2007) 135–144
- Meul, M., and S. Van Passel. 2009. Sustainability of Flemish Farms: Advising Farmers and Policymakers. AgSAP Conference 2009, Egmond aan Zee, The Netherlands
- Molnar A. 2008. Applying Sustainable Value Methodology for Hungarian Agriculture. 12th Congress of the European Association of Agricultural Economists – EAAE 2008
- Munawar, Ali. 2011. Rembesan Air Lindi (Leachate) Dampak Pada Tanaman Pangan Dan Kesehatan. UPN Press . Surabaya
- Murillo-Zamurano, L. 2004. Economics Efficiency and Frontier Technique. *Journal of Economic Surveys* Vol. 18 No 1 pp. 33-77.



- Munasinghe, M. 2004. Sustainomics: ATrans- Disciplanary Framework for Making Development More Sustainable. Munasinghe Institute for Development, Colombo Srilangka. <http://www.ecoeco.org/pdf/sustainomics.pdf>
- Musyafak, A. 2012. Optimasi Usahatani Berkelanjutan Berbasis *Crop Livestock System* Dan Ketahanan Pangan Rumah Tangga Petani Di Lahan Pasang Surut Kalimantan Barat. Disertasi Program Doktor Fakultas Pertanian Universitas Gadjah Mada Yogyakarta.
- Msuya, EE. Hisano, S and T. Nariu. 2008. Explaining Productivity Variation among Smallholder Maize Farmers in Tanzania. MPRA Paper No. 14626, posted 17. April 2009 / 15:03. Online at <http://mpra.ub.unimuenchen.de/14626/>
- Nahraeni, W. 2012. Efisiensi dan Nilai Keberlanjutan Usahatani Sayuran Dataran Tinggi di Provinsi Jawa Barat. Disertasi Sekolah Pasca Sarjana Institut Pertanian Bogor.
- Nambiar, K.K.M, A.P. Gupta, Qinglin Fu, S.Li. 2001. Biophysical, Chemical and Socio-Economic Indicators for Assessing Agricultural Sustainability in the Chinese Coastal Zone. *Agriculture, Ecosystems and Environment* 87 (2001) 209–214
- Niyongabo, J. 2004. Where Sustainable Agriculture Means Agricultural productivity? The Case Study of Gikongoro in Southern Rwanda.
- OECD. 1998. Eco-efficiency, Organisation for Economic Co-operation and Development, Paris.
- Ogundari,K., and S.O. Ojo. 2006. An Examination of Technical, Economic and Allocative Efficiency of Small Farm: The Case Study of Cassava Farmers in Osun State of Nigeria. *Journal Central European Agriculture*, 7(3) : (423-432)
- Okike, I., M.A. Jabbar., V.M. Manyong, J.W. Smith dan S.K. Ehui. 2004. Factors Affecting Farm-specific Production Efficiency in Savanna Zones of West Africa. *Journal of African Economics*, 2004 Volume 13, Number 1, PP 134-165.
- O'Neill, S., A. Leavy, and A.Mattews. 2001. Measuring Productivity Change and Efficiency on Irish farm, Technical Report, Teagasc Rural Economy Centre. Organisation for Economic Co-operation and Development.
- (OECD). 2001. Environmental Indicators for Agriculture Methods and Results
- Otsuki, K., I.Hardie, and E. Reis. 2002. The Implication of Property Rights for Joint Agriculture–Timber Productivity in the Brazilian Amazon. *Environment and Development Economics*, Vol. 7, (2002) pp. 299–323.
- Pacini, C., G. Giensen., A. Wossink., L. Omodei-Zorini and R. Huirne. 2004. The EU's Agenda 2000 Reform and Sustainability of Organic Farming in Tuscany: Ecological-economic Modelling at Field and Farm Level. *Agricultural Systems* 80, 171-197.
- P. Jan., M. Lips., A. Roesch., B. Lehmann, and M. Dumondel. 2008. Sustainable Value: An Application to the Swiss Dairy Farm of the Mountainous Area. 12th Congress of the European Association of Agricultural Economics – EAAE 2008.
- Parikh, A., A Farman, and M. K. Shah. 1995. Measurement of Economic Efficiency in Pakistani Agriculture. *American Journal of Agricultural economics* 77 (August 1995), 675-885.



- Pascual, U. 2005. Land Use Intensification Potential in Slash-and-bum farming Through Improvement in Technical Efficiency. *Ecological Economics*, Vol. 52, (2005) pp. 497 -511.
- Pender, J., B. Gebremedhin., S. Benin, and S. Ehui. 2001. Strategies for Sustainable Agricultural Development in the Ethiopian Highlands. *Amer. J. Agr. Econ.* 83 (Number 5, 2001): 1231–1240
- _____, E. Nkonya., P. Jagger., D. Sserunkuumab., H. Ssalic. 2004. Strategies to Increase Agricultural Productivity and Reduce Land Degradation: Evidence from Uganda. *Agricultural Economics* 31 (2004) 181–195
- Pretty, J, and R. Hine. 2001. Reducing Food Poverty with Sustainable Agriculture: A Summary of New Evidence. Final report from “SAFE-WORLD”. UK Departement for international development Bread for the World, and Greenpeace (Germany)
- Prihtanti, T M. 2014. Kinerja Dan Multifungsionalitas Usahatani Padi Organik dan Konvensional Di Provinsi Jawa Tengah. Disertasi Ilmu-ilmu Petanian UGM.
- Priyatno, D., 2009. *SPSS untuk Analisis Korelasi, Regresi dan Multivariate*. Penerbit Gawa Media, Yogyakarta.
- _____, 2007. Agricultural Sustainability: Concept, Principles, and Evidence.
- Rao, N. H., and P.P. Rogers. 2006. Assessment of Agricultural Sustainability. General Article. *Current Science*, Vol. 91, No. 4, 25 August 2006.
- Rasul and Thapa, 2004. Sustainability Of Ecological And Conventional Agricultural Systems In Bangladesh: An Assessment Based On Environmental, Economic And Social Perspectives. *Agricultural Systems* 79 (2004) 327–351.
- Reddy, Mahendra. 2002. Implication of Tenancy Status on Productivity and Efficiency: Evidence from Fiji. *Sri Lanka Journal of Agricultural Economics*. Volume 4. Part 1. Pp. 19 – 37.
- Reinhard, S., C.A. Knox Lovell, dan Geert Thijssen. 1999. Econometric Estimation of Technical and Environmental Efficiency: An Application to Dutch Dairy Farm. *Amer. J. Agr. Econ.* 81(February, 1999): 44-60.
- _____, C.A. Knox Lovell., and Geert Thijssen. 2002. Analysis of Environmental Efficiency Variation. *Amer. J. Agr. Econ.* 84(4) November 2002: 1054-1065.
- Richmond, J. 1974. Estimating the efficiency of production. *International Economic Review*.15:515-521.
- Ridaura, S. Lopez. 2005. Multi-Scale Sustainability Evaluation, A framework for the Derivation and Quantification of Indicators for Natural Resource Management Systems. Thesis, Wageningen University.
- Rigby, D., D. Howlett., and P. Woodhouse. 2000. Sustainability Indicators for Natural Resource Management & Policy. Working Paper 1. A Review of Indicators of Agricultural and Rural Livelihood Sustainability.
- _____, et al. 2001. Constructing a farm level indicator of sustainable agricultural practice. *Ecological Economics* 39 (2001) 463-478.
www.elsevier.com/locate/ecocon.



- Rios, A., and G. Shively. 2006. Farm Size and Non Parametric Efficiency Measurement for Coffee Farm in Vietnam. Forest, Tress, and Livelihood, Vol. 16, (2006) pp. 397- 412
- Russel, N.P., and T.Young. 1983. Frontier Production Function and the Measurement of Technical Efficiency. Journal of Agricultural Economics, 34:139-150.
- Sauer, J., and J.M. Abdallah,. 2007. Forest Diversity, Tobacco Production and Resource Management in Tanzania. Forest Policy and Economics, 9, 421-439. Doi:10.1016/j.forpol.2005.10.1007
- Saptana. 2011. Analisis Efisiensi Teknis Produksi Usahatani Cabai Merah Besar Dan Perilaku Petani Dalam Menghadapi Risiko. Jurnal Agro Ekonomi, Volume 28 No.2, Oktober 2010 : 153 – 188
- Sayaka, B dan R.S. Rivai. 2011. Peningkatan Akses Petani Terhadap Kredit Ketahanan Pangan dan Energi. Monografi Pusat Sosial Ekonomi dan Kebijakan Pertanian
- Schmidt, P. 1976. On the Statistical Estimation of Parametric Frontier Production Function. The Review of Economics and Statistics, 37(2) : 355-374.
- , 1986. Frontier Production Function. Econometric Review 4, 289-328.
- Sharma , K.R. Pradhan, N.C. and Leung, P.S. 2000. Stochastic Frontier Approach to Measuring Irrigation Performance: An Application to Rice Production Under the Two Systems in the Tarai of Nepal Water Resources Research, VOL. 37, NO. 7, P. 2009, 2001. doi:10.1029/2000WR900407
- Sherlund, M. S., Barret, C. B. & Adesina, A. A. 2002. Smallholder technical Efficiency Controlling for Environment Production Condition. Journal of Development Economics 69 (2002), 85 – 101.
- Smith, C. S., and G. T. McDonald. 1998. Assessing the Sustainability of Agriculture at the Planning Stage. Journal of Environmental Management (1998) 52, 15–37
- Soekartawi. 1990. Teori Ekonomi Produksi dengan Pokok Bahasan Analisis Fungsi Cobb Douglas. PT. Raja Grafindo Persada. Jakarta
- Solis, D., Boris E. Bravo-Ureta, and Ricardo E. Quiroga. 2009. Technical Efficiency among Peasant Farmers Participating in Natural Resource Management Programmes in Central America. Journal of Agricultural Economics, Vol.60, No. 1, 2009, 202-219. Doi:10.1111/j.1477-9552.2008.00173.x
- , B. Bravo-Ureta, and R. E. Quiroga. 2006. The Effect of Soil Conservation on Technical Efficiency: Evidence from Central America. Selected Paper prepared for presentation at the American Agricultural Economics Association Annual Meeting, Long Beach, California, July 23-26, 2006
- Stavins, R. N., A. F. Wagner, and G. Wagner,. 2002. Interpreting Sustainability in Economic Terms: Dynamic Efficiency Plus Intergenerational Equity. Resources for the Future, discussion paper .
- Stefanou, S. and S. Saxena. 1988. Education, Experience and Allocative Efficiency: A Dual Approach. American Journal of Agricultural Economics, Vol. 2, (1988) pp. 338–345.



- Subedi, M. et al. 2009. Use of Farmer's Indicators to Evaluate the Sustainability of Cropping System on Sloping Land in Yunnan Province, China. *Pedosphere* 19(3): 344-355, 2009. on www.elsevier.com/locate/pedosphere
- Sugiyono, 2007. Metode Penelitian Bisnis. Pendekatan Kuantitatif, Kualitatif dan R&D). Alfabeta. Bandung.
- Sukristyonubowo, R., Wiwik H., Sofyan A., Benito HP, and S. De Neve. 2011. Change from Conventional to Organic Rice Farming System: Biophysical and Socioeconomic Reasons. *International Research Journal of Agricultural Science and Soil Science.* Vo. 1(15) pp 172-182 July 2011 <http://www.interesjournals.org/IRJAS>.
- Suprapto,H., , U. Badrodin, B. Suryotomo. 2011. Pengaruh Limbah Batik terhadap Pertumbuhan dan Produksi Beberapa Varietas Padi di Wilayah Kota Pekalongan. Universitas Pekalongan.
- Suryana, Achmad. 2005. Pembangunan Pertanian Berkelanjutan Andalan Pembangunan Nasional. Makalah Seminar Sistem Pertanian Berkelanjutan untuk Mendukung Pembangunan Nasional tgl 15 Maret 2005. Universitas Sebelas Maret Solo.
- Syaukat, Y., and S. Pandey. The Future Perspective of Upland Rice farmer in Indonesia in Era Globalization. IRRI.
- Tao Zhang And Bao-Di Xue. 2005. Environmental Efficiency Analysis of China's Vegetable Production. *Biomedical And Environmental Sciences* **18**, 21-30
- Taylor, D. C., Z. A. Mohamed., M. N. Shamsudin., M. G. Mohayidin and E. F. Chiew. 1993. Creating a Farmer Sustainability Index: A Malaysian Case Study. *American Journal of Alternative Agriculture* 8(4), 175-183.
- Tchale, H and J. Sauer . 2007. The efficiency of maize farming in Malawi. A bootstrapped translog frontier *Cahiers d'Economie et Sociologie Rurales*, 2007, vol. 82-83, pages 33-56
- Tchale, H and J. Sauer . 2009. The Efficiency of Smallholder Agriculture in Malawi. *AFJARE Vol 3 No 2 September 2009*.
- Templet, P.H. 1999. Energy, Diversity, and Development in Economic System: an Empirical Analysis. *Ecological Economic* 30, 223-233.
- Thiele, H. and Brodersen, C. M. 1999. Difference in Farm Efficiency in Market and Transition Economies: Empirical Evidence from West and East Germany. *European Review of Agricultural Economics* 26(3), 331- 347.
- Thirtle, C. and J. Holding. 2003. Productivity of UK Agriculture: Causes and Constraints, Technical Report, Department for Environment, Food and Rural Affairs.
- Tyteca, D. 1998. Sustainability Indicators at The Firm Level, Pollution and Resource Efficiency als a Necessary Condition Toward Sustainability. *Journal of Industrial Ecology* 2(4), 61-77.
- Udoh, E..J. 2005. Technical Inefficiency in Vegetable Farms of Humid region: An Analysis of Dry Season Farming by Urban Woman in South Zone, Nigeria. *Journal of Agriculture & Social Sciences* 1813-2235/2005/01-2-80-85. <http://www.ijabjass.org>.
- Upton, M. 1979. The unproductive production function. *Journal of Agricultural Economics*. 30:179-194.



- Van Calker, K.J., 2005. Sustainability of Dutch dairy farming systems: A modelling approach. PhD Thesis, Wageningen University, The Netherlands, 208 pp.
- _____, K., P. Barentsen, I. de Boer, G. Giesen, and R. Huirne. 2004. An LP-model to Analyse Economic and Ecological Sustainability on Dutch Dairy Farms: Model Presentation and Application for Experimental farm de Marke. Agricultural System 82, 139-160.
- _____, C. Romero, G. Giesen, and R Huirne. 2006. Development and Application of A Multi-attribute Sustainability Function for Dutch Dairy Farming Systems. Ecological Economics 57, 640-658
- Van Passel, S., Lauwers, L., Guido Van Huylenbroeck. 2006a. Factors of Farm Performance: an Empirical Analysis of Structural and Managerial Characteristics, In: Causes and Impact of Agricultural Structure. http://www.gapem.org/Text/VanPassel_etal-FactorsFarmPerformance-Ch.pdf
- _____, Erik Mathijs, Guido Van Huylenbroeck. 2006b. Explaining Differences in Farm Sustainability: Evidence from Flemish Dairy Farms. Contributed paper prepared for presentation at the International Association of Agricultural Economists Conference, Gold Coast, Australia, August 12-18, 2006.
- Van Passel, S. 2008. Assessing Farm Sustainability with Value Oriented Methods. 12th Congress of the European Association of Agricultural Economists – EAAE 2008.
- _____, Guido van Huylenbroeck, Ludwig Lauwers, Erik Mathijs. 2009. Sustainable Value Assessment of Farm Using Frontier Efficiency Benchmarks. Journal of Environment Management 90 (2009) 3057 –3069.
- _____, and Marijke Meul. 2010. Multilevel Sustainability Assessment of Farming System: a Practical Approach. 9th Europen IFSA Symposium, 4-7 July 2010. Vienna (Austria).
- Viet-Ngu H. and M. Alauddin(2009). A new framework of measuring national nutrients balance for international and global comparison. *Discussion Paper No. 389*, May 2009, School of Economics, The University of Queensland. Australia.
- Villano, R. and E. Fleming, 2004. *Analysis of Technical Efficiency in a Rain-fed Lowland Rice Environment in Central Luzon Philippines using a Stochastic Frontier Production Function with Heteroskedastic Error Structure*. Working Paper Series in Agricultural and Resource Economics No.2004-15, University of New England, Armidale
- Wadud, M. D. A. 1999. Farm efficiency in Bangladesh. Thesis. Departemen of Agricultural Economics and Food Marketing. New Castle University
- and White B (2000) Farm Household Efficiency in Bangladesh: A Comparison of Stochastic Frontier and DEA Methods. Appl Econ 32:1665–1673
- Wahyudi, E . 2014. Analisis Keberlanjutan Usahatani Padi di Sekitar Batubara Kabupaten Kutai Kartanegara. Disertasi Program Doktor Fakultas Pertanian Universitas Gadjah Mada Yogyakarta.



- WCED (World Commission on Environment and Development). 1987. Our Common Future. New York: Oxford University Press.
- Weldesilassie, A. B., O. Frör, E. Boelle and S. Dabbert. 2009. The Economic Value of Improved Wastewater Irrigation: A Contingent Valuation Study in Addis Ababa, Ethiopia. Journal of Agricultural and Resource Economics, Vol. 34, No. 3 (December 2009), pp.428-449
- Wilson P, D. Hadley., S. Ramsden., and I. Kaltsas. 1998. Measuring and Explaining Technical Efficiency in UK Potato Production. Journal Agric Econ 49:294–305
- Woodward, R.T., and R. G. Bishop. 1995. Analysis Efficiency, Sustainability, and Global Warming. Ecological Economics 14 (1995) 101-111. Elsivier Science B.V.
- Yakin, A. 1997. *Ekonomi Sumberdaya dan Lingkungan: Teori dan Kebijaksanaan Pembangunan Berkelanjutan*. Jakarta : CV. Akademika Presindo
- Zamorano, L. R. M. 2004. Economic Efficiency and Frontier Techniques. Journal of Economic Surveys Vol. 18, No. 1. 2004.
- Zhen, Lin and J. K. Routray. 2003. Operational Indicators for Measuring Agricultural Sustainability in Developing Countries Environmental Management [Environ. Manage.]. Vol. 32, no. 1, pp. 34-46. Jul 2003. www.elsevier.com/locate/agree. DOI: 10.1007/s00267-003-2881-1.
- Zhen, Lin ., J. K. Routray., M. A. Zoebisch., G. Ched., Gaodi Xie, and Shengkui Cheng. 2005. Three dimensions of sustainability of farming practices in the North China Plain A case study from Ningjin County of Shandong Province, PR China. Agriculture, Ecosystems and Environment 105 (2005) 507–522. Tersedia dalam www.sciencedirect.com