UNIVERSITAS
GADJAH MADA
Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Agus, C. 2002. Production and Consumption of Carbon by Fast Growing Species of Gmelina Arborea Roxb in Tropical Plantation Forest. Proceedings of Seminar on Dipterocarp Reforestation to Restore Environment through Carbon Sequestration. Yogyakarta, Pp. 187 – 196.

Arifanti, V. B., Dharmawan, I. W. S., Wibowo, A. 2012. Perhitungan Karbon untuk Perbaikan Faktor Emisi dan Serapan GRK Kehutanan pada Hutan Alam Tanah Mineral. *Laporan Penelitian*. Bogor : Pusat Litbang Perubahan Iklim dan Kebijakan.

Asner, G. P., Sousan, S., Knapp, D. E., Selmants, P. C., Martin, R. E., Hughes, R. F., Giardina, C. P. 2016. Rapid Forest Carbon Assessments of Oceanic Islands : A Case Study of The Hawaiian Archipelago. *Carbon Balance and Management,* Vol. 11 (1), 1 – 13.

Baco, L. S., Sinukaban, N., Purwanto, Y. J., Sanim, B., Tarigan, S. D. 2011. Valuasi Ekonomi Hutan di Sub DAS Konaweha Hulu Provinsi Sulawesi Tenggara. *Agriplus*. Vol. 21 (2), 143 – 151.

Badan Standarisasi Nasional. 2011. *SNI 7724 : 2011 Pengukuran dan Perhitungan Cadangan Karbon-Pengukuran Lapangan untuk Penaksiran Cadangan Karbon Hutan (Ground Based Forest Carbon Accounting)*. Jakarta : BSN.

Bakosurtanal. 2005. *Pedoman Survei Cepat Terintegrasi Wilayah Kepesisiran*. Yogyakarta : BPFG.

Barbier, E. B., Hacker, S. D., Kennedy, C., Koch, E. W., Stier, A. C., Silliman, B. R. 2011. The Value of Estuarine and Coastal Ecosystem Services. *Ecological Monograph*, Vol. 81 (2), 169 – 193.

Basuki, T. M., van Laake, P. E., Skidmore, A. K., Hussin, Y. A. 2009. Allometric Equations for Estimating the Above-ground Biomass in Tropical Lowland Dipterocarp Forests. *Forest Ecology and Management*. Vol. 257, 1684 – 1694.

Bengen, D. G. 2001. *Pedoman Teknis Pengenalan dan Pengelolaan Ekosistem Mangrove*. Bogor : Kajian Sumberdaya Pesisir dan Lautan – Institut Pertanian Bogor.

UNIVERSITAS
GADJAH MADA
Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Bohn, H. L., McNeal, B. L., O'Connor, G. A. 2001. *Soil Chemistry*. 2nd eds. United States of America : Wiley.

BPS. 2015. Luas Kawasan Hutan dan Perairan Menurut Provinsi di Indonesia. http://www.bps.go.id/linkTabelStatis/view/id/1716 diakses tanggal 7 Maret 2016.

Brown, S., Sathaye, J., Cannel, M., Kauppi, P. 1996. Managemet of Forests for Mitigation of Greenhouse Gas Emissions. *Climate Change 1995 : Impacts, Adaptations, and Mitigation of Climate Change – Scientific – Technical Analysis*. Cambridge : Cambridge University Press.

Brown, S. 1997. Estimating Biomass and Biomass Change of Tropical Forests : a Primer. *FAO Forestry Paper 134*. Rome : FAO.

Buckman, H. O., Brady, N. C. 1982. *Ilmu Tanah*. *Diterjemahkan oleh : Soegiman*. Jakarta : Penerbit Bhratara Karya Aksara.

Carlisle, E. A., Steenwerth, K. L., Smart, D. R. 2006. Effects of Land Use on Soil Respiration : Coversion of Oak Woodlands to Vineyards. *Journal Environment Quality*. Vol. 35, 1396 – 1404.

Chambers, J. Q., Tribuzy, E. S., Toledo, L. C., Crispim, B. F., Higuchi, N., Dos Santos, J., Araujo, A. C., Kruijt, B., Nobre, A. D., Trumbore, S. E. 2004. Respiration from A Tropical Forest Ecosystem : Partitioning of Source and Low Carbon Use Efficiency. *Ecological Applications*. Vol. 14 (4), 72 – 88.

Chang, S., Wang, X. 2015. Modelling and Computation in the Valuation of Carbon Derivatives with Stochastic Convenience Yields. *Plos One*, Vol.10 (5), 1 – 35.

Chapin, S., Matson, P. A., Mooney, H. A. 2002. *Principles of Terrestrial Ecosystem Ecology*. United States of America : Springer-Verlag.

Chazdon, R. L. and Coe, F. G. 1999. Ethnobotany of woody species in second growth, old growth, and selectively logged forest of Noortheastern Costa Rica. *Conservation Biology*, Vol. 13, 1312 – 1322.

Cheng, Z., Xie Y., Lu, Y. 2006. Impact of land-use patterns upon karst processes : taking Nongla Fengcong depression area in Guangxi as an example. *Acta Geographic Sinica.* Vol. 61 (11), 1181 – 1188.

Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi
Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Cheng, Z. 2010. Seasonal variation of dissolution rate under the soil at different land uses and its influence factors A case study of Jinfo Mountain, Chongqing. *Geological Review*. Vol. 56 (1), 136 – 140.

Daoxian, Y., Cai, G. 1988. *Karst Environmental Science*. Chongqing : Chongqing Science and Technology Publishing.

Daoxian, Y., Cheng, Z. 2002. *Karst Processes and The Carbon Cycle Final Report of IGPC379*. Beijing, China : Geological Publishing House.

Dixon, R. K., Solomon, A., Brown, S., Houghton, R., Trexier, M. 1994. Carbon Cycling and Soil Carbon Storage in Mesic to Wet Hawaiian Montane Forests. *Ecology*, Vol. 82, 3182 – 3196.

Djamal, B., Sudana, D., Soetrisno, Baharuddin, Hasan, K. 1995. *Peta Geologi Lembar Tanjung Mangkalihat, Kalimantan*. Bandung : Pusat Penelitian dan Pengembangan Geologi.

Effendi, H. 2003. *Telaah Kualitas Air Bagi Pengelolaan Sumberdaya dan Lingkungan Perairan*. Yogyakarta : Kanisius.

Esteban G. J., Jackson, R. B. 2000. The Vertical Distribution of Soil Organic Carbon and Its Relation to Climate and Vegetation. *Journal Ecological Applications America*, Vol. 10, 423 – 436.

Fahmudin, A., Hairiah K., Mulyani A. 2011. Petunjuk Praktis Pengukuran Cadangan Karbon Tanah Gambut. Bogor : World Agroforestry Centre-ICRAF, SEA Regional Oice dan Balai Besar Penelitian dan Pengembangan Sumberdaya Lahan Pertanian (BBSDLP).

Fauzi, D. D., Wijayanto, N., Kusmana, C. 2011. Kajian Potensi Karbon pada Sumberdaya Hutan Gayo Lues. *Jurnal Hutan dan Masyarakat*. Vol. 6 (2).

Fearnside, P. M. and Guimares, W. M. 1996. Carbon uptake by secondary forest in Brazilian Amazonia. *Forest Ecology Management*, Vol. 80, 35 – 46.

Fitzherbert, E. B., Struebig, M. J., Morel, A., Danielsen, F., Bruhl, C. A., Donald, P. F., Phalan, B. 2008. How will oil palm expansion affect biodiversity?. *Trends in Ecology and Evolution*. Vol. 23 (10), 538 – 545.

Ford, D.C. dan P.W. William. 2007. *Karst Geomorphology and Hydrology*. Chicester : John Willey and Sons.

Fröberg, M., Kleja, D.B., Bergkvist, B., Bryant, C., Mulder, J. 2006. Concentration and fluxes of dissolved organic carbon (DOC) in three

UNIVERSITAS
GADJAH MADA
Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Norway spruce stands along a climatic gradient in Sweden. *Biogeochemistry*. Vol. 77, 1 – 23.

Fujii, K., Funakawa, S., Hayakawa, C., Kosaki, T. 2008. Contribution of different proton sources to pedogenetic soil acidification in forested ecosystems in Japan. *Geoderma*. Vol. 144 (3–4), 478 – 490.

Fujii, K., Uemura, M., Hayakawa, C., Funakawa, S., Sukartiningsih, Kosasi, T., Ohta, S. 2009. Fluxes of Dissolved Organic Carbon in Two Tropical Forest Ecosystems of East Kalimantan, Indonesia. *Geoderma*. Vol. 152, 127 – 136.

Germer, J., Sauerborn, J. 2008. Estimation of the impact of oil palm plantation establishment on greenhouse gas balance. *Environ Dev Sustain*. Vol. 10 (6), 697 – 716.

Giorgiou, S., Whittington, D., Pearce, D., Moran, D. 1997. *Economic Values and the Environment in the Developing World*. UK : Cheltenham.

Griscom, B., Ellis, P., Putz, F. E. 2014. Carbon Emissions Performance of Commercial Logging in East Kalimantan, Indonesia. *Global Change Biology*. Vol. 20, 923 – 937.

Guitart, A. B., Rodriguez, L. C. E. 2010. Private Valuation of Carbon Sequestration in Forest Plantation. *Ecological Economics Journal*, Vol. 69, 451 – 458.

Hairiah, K., Ekadinata, A., Sari, R.R., Rahayu, S. 2011. *Pengukuran Cadangan Karbon dari Tingkat Lahan ke Bentang Lahan*. Edisi 2. Bogor : World Agroforestry Center, ICRAF Southeast Asia dan Universitas Brawijaya.

Hanson, P. J., Edwards, N. T., Garten, C. T., Andrews, J. A. 2000. Separating root and soil microbial contributions to soil respiration: A review of methods and observations. *Biogeochemistry*. Vol. 48, 115 – 146.

Harini, R. 2012. Kajian Spasial Valuasi Ekonomi Lahan Pertanian Terkonversi dan Dampaknya terhadap Produksi Pangan di Kabupaten Sleman. *Disertasi*. Yogyakarta : Fakultas Geografi UGM.

Haryono, E. dan Adji, T.N. 2004. *Pengantar Geomorfologi dan Hidrologi Karst*. Yogyakarta : Kelompok Studi Karst Fakultas Geografi UGM.

UNIVERSITAS GADJAH MADA
Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Haryono, E. 2011. Atmospheric Carbon Dioxide Sequestration Trough Karst Denudation Processes. *Proceeding Asian Trans-disciplinary Karst Converence*. Yogyakarta : UGM.

Haryono, E., Danardono, Mulatsih, S., Putro, S. T., Adji, T. N. 2016. The Nature of Carbon Flux in Gunungsewu Karst, Java-Indonesia. *Acta Carsologica*. Vol. 45 (1), 173 – 185.

Hashimoto, T., Tange, T., Masumori, M., Yagi, H., Sasaki, S., Kojima, K. 2004. Allometric Equation for Pioneer Tree Species and Estimation of the Aboveground Biomass of Tropical Secondary Forest in East Kalimantan. *Tropics*. Vol. 14 (1), 123 – 130.

Hendri, J. 2014. Fluks CO_2 dari Penggunaan Lahan Hutan, Teh, dan Holtikultura pada Andisol Jawa Barat. *Tesis pada Sekolah Pascasarjana IPB*. Bogor : tidak dipublikasikan.

IPCC. 1995. Summary of Policy Makers the Science of Climate Change. IPCC Working Group I. http://www.ipcc.ch/cc95/wg.1.htm diakses tanggal 8 Maret 2016.

IPCC. 2001. Third Assessment Report: Climate Change 2001. Working Group I : The Scientific Basis. http://www.grida.no/climate/ipcc_tar/wg1/fig3-1.htm. Diakses tanggal 8 Maret 2016.

Indrarto, G.B., Murharjanti, P., Khatarina, J., Pulungan, I., Ivalerina, F., Rahman, J., Prana, M.N., Resosudarmo, I.A.P. dan Muharrom, E. 2013. *Konteks REDD+ di Indonesia: Pemicu, pelaku, dan lembaganya*. Bogor : CIFOR.

Irawan, A., June, T. 2011. Hubungan Iklim Mikro dan Bahan Organik Tanah dengan Emisi CO_2 dari Permukaan Tanah di Hutan Alam Babahaleka Taman Nasional Lore Lindu, Sulawesi Tengah. *Jurnal Agromet*. Vol. 25 (1), 1 – 8.

Irwan, Z. D. 2007. *Prinsip – Prinsip Ekologi, Ekosistem, Lingkungan, dan Pelestariannya*. Jakarta : Bumi Aksara.

Jackson, R. B., Mooney, H. A., Schulze, E. D. 1997. A Global Budget for Fine Root Biomass, Surface Area, and Nutrient Contents. *Ecology*. Vol. 94, 7362 – 7366.

Jennings. 1971. *Karst Geomorphology*. 2nd Edition. New York : Basil Blackwell Inc.

UNIVERSITAS
GADJAH MADA
**Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi
Kalimantan Timur**
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Joffre, R., Ourcival, J., Rambal, S., Rocheteau, A. 2003. The key role of topsoil moisture on CO efflux from a Mediterranean Quercus ilex forest. *Ann. Forest Science*. Vol. 60, 519 – 526.

Kabupaten Berau. 2013. *Surat Keputusan Bupati Berau Nomor 290 Tahun 2013 tentang kawasan lindung dan wisata alam Labuhan Cermin di Biduk – Biduk*. Berau : Sekretaris Daerah Kabupaten Berau.

Kay, R., Adler, J. 2000. *Coastal Planning and Management*. London : Routledge.

KemenLH. 2007. *Panduan Valuasi Ekonomi Sumberdaya Alam dan Lingkungan*. Jakarta : Kementerian Negara Lingkungan Hidup.

Kiyono, Y., Hastaniah. 2000. The role of slash-and-burn agriculture in transforming Dipterocarp forest into Imperata grassland. *Ecological Studies*. Vol. 140, 199 – 208.

Krisnawati, H., Adinugroho, W. C., Imanuddin, R. 2012. *Monograf Model – Model Alometrik untuk Pendugaan Biomassa Pohon pada Berbagai Tipe Ekosistem Hutan di Indonesia*. Bogor : Pusat Penelitian dan Pengembangan Konservasi dan Rehabilitasi, Badan Penelitian dan Pengembangan Kehutanan.

Krisnawati, H., Adinugroho, W. C., Imanuddin, R., Hutabarat, S. 2014. *Estimation of Forest Biomass for Quantifying CO_2 Emissions in Central Kalimantan, A Comprehensive Approach in Determining Forest Carbon Emission Factors*. Bogor : Research and Development Center for Conservation and Rehabilitation, FORDA.

Kulshreshtha, S. N., Junkins, B., Desjardins, R. D. 2000. Prioritizing Greenhouse Gas Emission Mitigation Measures : Application of A System Approach. *Canadian Journal of Agricultural Economics*, Vol. 47 (4), 475 - 486.

Lal, R. 2005. Forest Soil and Carbon Sequestration. *Forest Ecology and Management*. Vol. 220, 242 – 258.

Lal, R. 2007. Carbon Management in Agricultural Soils. *Mitigation and Adaptation Strategies for Global Change*. Vol. 12, 303 – 322.

Lal, R. 2008. Sequestration of Atmospheric CO_2 in Global Carbon Pools. *Energy and Environmental Science*. Vol. 1, 86 – 100.

Lal, R., Negassa, W., Lorenz, K. 2015. Carbon Sequestration in Soil. *Current Opinion in Enviromental Sustainability*. Vol. 15, 79 – 86.

UNIVERSITAS
GADJAH MADA
Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Lal, R. 2016. Soil Health and Carbon Management. *Food and Energy Security*. Vol. 5 (4), 212 – 222.

Larionova, A. A., Yermolayev, A. M., Blagodatsky, S. A., Rozanova, L. N., Yevdokimov, I. V., Orlinsky, D. B. 1998. Soil Respiration and Carbon Balance of Gray Forest Soils as Affected by Land Use. *Biol Fertil Soils*. Vol. 27, 251 – 257.

Li, P., Wang, Q., Endo, T., Zhao, X., Kakubari, Y. 2009. Soil Organic Carbon Stock in Closely Related to Aboveground Vegetation Properties in Cold-Temperate Mountainous Forests. *Geoderma*. Vol. 154, 407 – 415.

Lipton, D. W., Wellman, K., Sheifer, I. C., Weiher, R. F. 1995. *Economic Valuation of Natural Resources : A Handbook for Coastal Resource Policymakers*. NOAA Coastal Ocean Program Decision Analysis Series No. 5 NOAA Coastal Office, Silver Spring, MD.

Liu, Y., Liu, C., Wang, S., Guo, K., Yang, J., Zhang, X., Li, G. 2013. Organic Carbon Storage in Four Ecosystem Types in The Karst Region of Southwestern China. *Plos One*, Vol. 8 (2), 1 – 9.

Lonsdale, W. M. 1988. Predicting the Amount of Litterfall in Forests of the World. *Annals of Botany*. Vol. 61 (3), 319 – 324.

Lu, X. T., Yin, J. X., Qi, J. F., Jepsen, M. R., Tang, J. W. 2010. Ecosystem Carbon Storage and Partitioning in A Tropical Seasonal Forest in Southwestern China. *Forest Ecology and Management*. Vol. 260, 1798 – 1803.

Ma, J., Bu, R., Liu, M., Chang, Y., Qin, Q., Hu, Y. 2015. Ecosystem Carbon Storage Distribution Between Plant and Soil in Different Forest Types in Northeastern China. *Ecological Engineering*, Vol. 81, 353 – 362.

Malhi, Y., Baldocchi, D. D., Jarvis, P. G. 1999. The Carbon Balance of Tropical, Temperate, and Boreal Forests. *Plant, Cell, and Environment*. Vol. 22, 715 – 740.

Marfai, M. A., King, L., Singh, L. P., Mardiatno, D., Sartohadi, J., Hadmoko, D. S., Dewi, A. 2008. Natural Hazards in Central Java Province, Indonesia : An Overview. *Environmental Geology*, Vol. 56, 335 – 351.

MEA (Millennium Ecosystem Assessment), 2005. *Ecosystems and Human Well-being: Biodiversity Synthesis*. Washington D.C : World Resources Institute.

UNIVERSITAS
GADJAH MADA
Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Mégevand, C., 1998. *Les programs forestiers. Un moyen de lutte efficace contre le réchauffement global*. Paris : Mémoire INA - PG.

Mukhortova, L., Schepaschenko, D., Shvidenko, A., McCallum, I., Kraxner, F. 2015. Soil Contribution to Carbon Budget of Russian Forests. *Agricultural and Forest Meteorology*, Vol. 200, 97 – 108.

Mulatsih, S. 2010. Aliran Karbon dalam Tanah di Sepanjang Toposekuen Perbukitan Karst Formasi Wonosari Kabupaten Gunungkidul. *Tesis Sekolah Pascasarjana UGM*. Yogyakarta : tidak dipublikasikan.

Ni, J., Luo, D. H., Xia, J., Zhang, Z. H., Hu, G. 2015. Vegetation in Karst Terrain of Southwestern China Allocates more Biomass to Roots. *Solid Earth*, Vol. 6, 799 – 810.

NOAA. 2015. Trends in Atmospheric Carbon Dioxide. http://www.ersl.noaa.gov/gmd/ccgg/trends/ diakses tanggal 7 Maret 2016.

Notohadipoero, S. 1982. *Pengantar Ilmu Tanah*. Yogyakarta : Departemen Ilmu Tanah, Fakultas Pertanian, UGM.

Obidzinski, K., Andriani, R., Komarudin, H. dan Andrianto, A. 2012. Environmental and Social Impacts of Oil Palm Plantations and their Implications for Biofuel Production in Indonesia. Ecology and Society. Vol. 17 (1), 25.

Palm, C. A., Houghton, R. A., Melillo, J. M., Skole, D. L. 1986. Atmospheric Carbon Dioxide from Deforestation in Southeast Asia. *Biotropics*.

Patton, D., Bergstrom, J. C., Moore, R., Covich, A. P. 2015. Economic Value of Carbon Storage in U.S. National Wildlife Refuge Wetland Ecosystems. *Ecosystem Services*, Vol. 16, 94 – 104.

Phillips, C. L., Lamberty, B. B., Desai, A. R., Lavoie, M., Risk, D., Tang, J., Todd-Brown, K., Vargas, R. 2016. The Value of Soil Respiration Measurements for Interpreting and Modeling Terrestrial Carbon Cycling. *Plant Soil*.

Pinol, J., Alcaniz, J. M., Roda, F. 1995. Carbon dioxide efflux and pCO in soils of three Quercus ilex montane forests. *Biogeochemistry*. Vol. 32, 53 – 69.

Popo-Ola, F. S., Aiyeloja, A. A., Adedeji, G. A. 2012. Sustaining Carbon Sink Potentials in Tropical Forest. *Journal of Agriculture and Social Research*. Vol. 12 (1), 64 – 73.

UNIVERSITAS
GADJAH MADA
Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Poudel, B. C. 2012. Forest Biomass Production Potential and Its Implication for Carbon Balance. *Thesis Department of Engineering and Sustainable Development Mid Sweden University*. Sweden.

Prentice, I. C. 2001. *The Carbon Cycle and Atmospheric Carbon Dioxide*. Climate Change 2001 : The Scientific Basis IPCC. Cambridge : Cambridge University Press.

Price, C., Willis, R. 1993. Time, Discounting, and The Valuation of Forestry's Carbon Fluxes. *Commonwealth Forestry Review*, Vol. 72 (4), 265 – 271.

Proctor, J. 1983. *Tropical Litterfalls in Tropical Rain Forest, Ecological, and Management 2*. Oxford : Blackwell Scientific Publication.

Purnomo, H. 2006. Degradasi Hutan dan Pengangguran : Menuju Pengelolaan Hutan Skala Kecil. *Jurnal Manajemen Hutan Tropika*, Vol. XII (2), 44 – 56.

Raich, J. W., Schlesinger, W. H. 1992. The global carbon dioxide flux in soil respiration and its relationship to vegetation and climate. *Tellus B*. Vol. 44, 81 – 99.

Reichstein, M., Tenhunen, J. D., Roupsard, O., Ourcival, J. M., Rambal, S., Dore, S., Valentini, R. 2002. Ecosystem respiration in two Mediterranean evergreen holm oak forests: Drought effects and decomposition dynamics. *Function Ecology*. Vol. 16, 27 – 39.

Ritter, D.F. 1995. *Process Geomorphology*. Ed.3. Dubuque : usn. C. Brown Publisher.

Republik Indonesia. 2009. *Undang-Undang Republik Indonesia Nomor 32 tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup (UUPPLH)*. Jakarta : Sekretariat Negara.

Republik Indonesia. 2012. *Peraturan Menteri Negara Lingkungan Hidup Republik Indonesia Nomor 15 Tahun 2012 tentang Panduan Valuasi Ekonomi Ekosistem Hutan*. Jakarta : Sekretariat Kabinet.

Roger, S., Brent, S. 2012. Carbon Sequestration in Forests and Soils. *Annual Review of Resources Economics*. Vol. 4, 127 – 144.

Rusolono, T. 2006. Model Pendugaan Persediaan Karbon Tegakan Agroforestri untuk Pengelolaan Hutan Milik Melalui Skema Perdagangan Karbon. *Disertasi Sekolah Pascasarjana IPB*. Bogor : tidak dipublikasikan.

UNIVERSITAS
GADJAH MADA
Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Santosa, L. W. 2013. *Tipologi Wilayah Pesisir*. Yogyakarta : Fakultas Geografi UGM.

Schimel, D. S. 1995. Terrestrial Ecosystems and The Carbon-Cycle. *Global Change Biology*, Vol. 1, 77 – 91.

Schumacher, B. A. 2002. *Method for The Determination of Total Organic Carbon (TOC) in Soils and Sedimens*. Las Vegas : United States Environmental Protection Agency.

Shengyou, X., Shiyi, H. 2002. The CO_2 Regime of Soil Profile and Its Drive to Dissolution of Carbonate Rock. *Final Report of IGPC379*. Pp. 83 – 89.

Simbolon, D. Y. P., Afifuddin, Y., Latifah, S. 2015. Valuasi Ekonomi Hutan Tele di Kabupaten Samosir. Peronema Forestry Science. Vol. 4 (3), 1 – 9.

Soedomo, M. 2001. *Pencemaran Udara*. Penerbit ITB. Bandung.

Soil Survey Staff. 2014. *Keys to Soil Taxonomy*. 12th Eds. United States of America : USDA.

Song, G., Li, L., Pan, G., Zhang, Q. 2004. Topsoil Organic Carbon Storage of China and Its Loss by Cultivation. *Biogeochemistry*. Vol. 74, 47 – 62.

Srijono. 2008. Kendali Karstifikasi dalam Pembentukan Tanah Daerah Aliran Sungai Jirak, Kabupaten Gunungkidul, Daerah Istimewa Yogyakarta. *Jurnal Media Teknik*. Vol. 30 (2), 119 – 124.

Sujarwo, W. dan Darma, I. D. P. 2011. Analisis vegetasi dan pendugaan karbon tersimpan pada pohon di kawasan sekitar gunung dan danau Batur Kintamani Bali. *Jurnal Bumi Lestari,* Vol. 11 (1), 85 – 92.

Sunarto. 2004. Perubahan Fenomena Geomorfik Daerah Kepesisiran di Sekeliling Gunungapi Muria. *Disertasi*. Fakultas Geografi UGM.

Sunarto, Marfai, M. A., Setiawan, M. A. 2014. *Geomorfologi dan Dinamika Pesisir Jepara*. Yogyakarta : Gadjah Mada University Press.

Sutaryo, D. 2009. *Perhitungan Biomassa Sebuah Pengantar untuk Studi Karbon dan Perdagangan Karbon*. Bogor : Wetlands International Indonesia Programme.

Suwardi, A. B., Mukhtar, E., Syamsuardi. 2013. Komposisi Jenis dan Cadangan Karbon di Hutan Tropis Dataran Rendah, Ulu Gadut, Sumatera Barat. *Berita Biologi,* Vol. 12, 169 – 176.

UNIVERSITAS
GADJAH MADA
Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Takahashi, M., Ishizuka, S., Ugawa, S., Sakai, Y., Sakai, H., Ono, K., Hashimoto, S., Matsuura, Y., Morisada, K. 2010. Carbon Stock in Litter, Deadwood, and Soil in Japan's Forest Sector and Its Comparison with Carbon Stock in Agricultural Soils. *Soil Science and Plant Nutrition*. Vol. 56 (1), 19 – 30.

Tan, K. H. 1994. *Environmental Soil Science*. United States of America : Marcel Dekker, Inc.

Tang, J. W., Yin, J. X., Qi, J. F., Jepsen, M. R., Lu, X. T. 2012. Ecosystem Carbon Storage of Tropical Forests over Limestone in Xishuangbanna, SW China. *Journal of Tropical Forest Science*. Vol. 24 (3), 399 – 407.

Thuille, A., Buchmann, N., Schulze, E. D. 1999. Carbon Stocks and Soil Respiration Rates during Deforestation, Grassland Use and Subsequent Norway Spruce Afforestation in the Southern Alps, Italy. *Tree Physiology*. Vol. 20, 849 – 857.

Tjasyono, B. 2004. *Klimatologi*. Bandung : Penerbit ITB.

Toma, T., Matius, P., Hastaniah, Kiyono, Y., Watanabe, R., Okimori, Y. 2000. Dynamics of burned lowland Dipterocarp forest stands in Bukit Soeharto, East Kalimantan. *Ecological Studies*. Vol. 140, 107 – 119.

Torres, A. B., MacMillan, D. C., Skutsch, M., Lovett, J. C. 2012. The Valuation of Forest Carbon Services by Mexican Citizens : The Case of Guadalajara City and La Primavera Biosphere Reserve. *Reg Environ Change Journal*, Vol. 13, 661 – 680.

Ulumuddin, Y.I. dan W. Kiswara. 2010. Mangrove dan Lamun dalam Siklus Karbon Global. *Jurnal Oseanografi*, Vol. XXXV (2), 39 – 46.

Ulya, N. A., Warsito, S. P., Andayani, W., Gunawan, T. 2015. Nilai Ekonomi Karbon Hutan Rawa Gambut Merang Kepayang, Provinsi Sumatera Selatan. *Jurnal Manusia dan Lingkungan*, Vol. 22 (1), 52 – 58.

UNFCCC. 2009. *Decision 4/CP.15: methodological guidance for activities relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forest and enhancement of forest carbon stocks in developing countries*. FCCC/CP/11/Add. 1

UNFCCC. 2010. *Annex 5: policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forest and*

Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi
Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

enhancement of forest carbon stocks in developing countries. FCCC/CP/2010/2

USDA. 1999. *Soil Quality Test Kit Guide*. United States America : United States Department of Agriculture.

Van der Kamp, J., Yassir, I., Buurman, P. 2009. Soil Carbon Changes Upon Secondary Succession in Imperata Grasslands (East Kalimantan, Indonesia). *Geoderma*. Vol. 149, 76 – 83.

Van der Laan, C., Verweij, P. A., Quinones, M. J., Faaij, A. P. C. 2014. Analysis of Biophysical and Anthropogenic Variables and their Relation to the Regional Spatial Variation of Aboveground Biomass Illustrated for North and East Kalimantan, Borneo. *Carbon Balance and Management*. Vol. 9 (8), 1 – 12.

Watanabe, M. D. B., Ortega, E. 2011. Ecosystem Service and Biogeochemical Cycles on A Global Scale : Valuation of Water, Carbon, and Nitrogen Processes. *Environmental Science and Policy Journal,* Vol. 14, 594 – 604.

White, W. B. 1988. *Geomorphology and Hydrology of Karst Terrains*. New York : Oxford University Press.

Wibowo, A., Ginoga, K., Nurfatriani, F. 2010. *REDD+ & Forest Governance*. Bogor : Pusat Penelitian Sosial Ekonomi dan Kebijakan Kehutanan.

Widada. 2004. Nilai Manfaat Ekonomi dan Pemanfaatan Taman Nasional Gunung Halimun bagi Masyarakat. *Disertasi Sekolah Pascasarjana IPB*. Bogor : tidak dipublikasikan.

Yang, H., Zhou, L., Huang, L., Cao, J., Groves, C. 2014. A Comparative Study of Soil Carbon Transfer Between Forest Soils in Subtropical Karst and Clasolite Areas and The Karst Carbon Sink Effect in Guilin, Guangxi, China. *Environ Earth Science Journal,* Vol. 74, 921 – 928.

Yano, Y., Lajtha, K., Sollins, P., Caldwell, B.A. 2004. Chemical and seasonal controls on dynamics of dissolved organic matter in a coniferous old-growth stand in the Pacific Northwest, USA. *Biogeochemistry*. Vol. 71, 197–223.

Yuliyanto. 2015. Pendugaan Cadangan Karbon Tersimpan pada Kelapa Sawit (*Elaeis guineensis Jacq.*) dan Analisis Kesuburan Tanah di Perkebunan PT Daria Dharma Pratama Ipuh Bengkulu. *Tesis pada Sekolah Pascasarjana IPB*. Bogor : tidak dipublikasikan.

UNIVERSITAS
GADJAH MADA
Nilai Ekonomi Karbon pada Berbagai Ekosistem di Wilayah Karst Biduk-Biduk, Kabupaten Berau, Provinsi Kalimantan Timur
DANARDONO, Dr. Eko Haryono, M.Si.; Dr. M. Widyastuti, M.T.
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Yulyana, R. 2005. Potensi Kandungan Karbon pada Pertamanan Karet (*Hevea brasiliensis*) yang disadap (Studi Kasus di Perkebunan Inti Rakyat Kecamatan Pondok Kelapa, Kabupaten Bengkulu Utara). *Tesis Sekolah Pascasarjana IPB*. Bogor : tidak dipublikasikan.

Zaihua, L., Zhao, J. 2000. Contribution of Carbonate Rock Weathering to The Atmospheric CO_2 Sink. *Environmental Geology*. Vol. 39 (9), 1053 – 1058.

Zhongcheng, J., Daoxian, Y. 1999. CO_2 Source-Sink in Karst Processes in Karst Areas of China. *Episodes*, Vol. 22 (1), 33 – 35.

Zulqisthi, G. 2014. Tingkat Laju Pelarutan dan Penyerapan Karbon di Kawasan Karst Gunugsewu Menggunakan Standard Limestone Tablets dan Hidrokimia : Studi DTA Mataair Ngeleng, Giritirto, Purwosari, Gunungkidul. *Skripsi Fakultas Geografi UGM*. Yogyakarta : tidak dipublikasikan.