MUNETA YOKOMATSU

Curriculum Vitae (March, 2023)

Population and Just Societies Program, International Institute for Applied Systems Analysis (IIASA)

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<u>BIRTH</u>

Nov. 22nd, 1973 in Oita, Japan

NATIONALITY

Japan

EDUCATION

- Ph.D., Graduate School of Civil Engineering, Kyoto University (2003)
- M.S., Graduate School of Civil Engineering, Kyoto University (1999)
- B.S.E., Department of Civil Engineering, Kyoto University (1997)

EMPLOYMENT

- Apr. 15, 2022 Present: Senior Research Scholar in International Institute for Applied Systems Analysis (IIASA)
- Mar. 1, 2021 April. 14, 2022: Guest Research Scholar in International Institute for Applied Systems Analysis (IIASA)
- Nov. 9, 2020 Feb. 28, 2021: Associate Research Scholar in International Institute for Applied Systems Analysis (IIASA)
- Mar. 22, 2018 Nov. 8, 2020: Guest Research Scholar in International Institute for Applied Systems Analysis (IIASA)
- Jan. 17, 2018 Present: Visiting Researcher in Center for Spatial Information Science, University of Tokyo
- Apr. 1, 2008 Present: Visiting Researcher in Waseda University Organization for Japan-US Studies

- Apr. 10, 2008 Mar. 31, 2009: Visiting researcher in the Department of Applied Economics, University of Minnesota
- Apr. 1, 2008 Mar. 31, 2012: Visiting Associate Professor in Department of Civil Engineering, University of Tokyo
- Sept. 1, 2005 Mar. 31, 2022: Associate professor in Disaster Prevention Research Institute (DPRI), Kyoto University
- Apr. 1, 2001 Aug. 31, 2005: Research associate in Department of Social Systems Engineering, Tottori University

HONORS and AWARDS

- Outstanding Civil Engineering Achievement Award to "Local Assets as Artifacts and a Resident's Identity Formation: Category-Selection-Model Approach", Japan Society of Civil Engineers, 2015
- Aniello Amendola Distinguished Service Award, International Society of Integrated Disaster Risk Management (IDRiM), 2015
- Award for Outstanding Scientific Research Results to "Decentralized Mitigation and Regional Allocation of Disaster Risk", Tottori University, 2003
- DPRI-IIASA Award for Interactive Session for Young Researchers to "International Externality Generated by Fiscal Policy for Recovery from Disaster", The Third DPRI - IIASA International Symposium on Integrated Disaster Risk Management, Kyoto, 2003
- Honorable Mention to "Intergenerational Risk-Sharing through Infrastructure and Disaster Fund: Roles of Government", Young Scientist Summer Program 2001, International Institute for Applied Systems Analysis (IIASA), 2001
- Outstanding Civil Engineering Achievement Award to "Decentralized Mitigation and Regional Allocation of Disaster Risk", Japan Society of Civil Engineers, 2001
- Outstanding Civil Engineering Achievement Award to "Catastrophe Risks and Economic Valuation of Disaster Prevention Investment", Japan Society of Civil Engineers, 2000

ACADEMIC SOCIETY AFFILIATION

(As of March 2023) The International Society for Integrated Disaster Risk Management (IDRiM), Japan Society of Civil Engineers, Japan Society for Natural Disaster Science

INVITED PRESENTATION

46th Annual Natural Hazards Research and Applications Workshop, University of Colorado Boulder (2021), Inter-American Development Bank (2019), Pacific Consultant (at World Bosai Forum, 2017), The Osaka Bar Association (2017), International Center for Water Hazard and Risk Management (2015, 2016), University of Minnesota (2009), University of British Columbia (2006), Tokyo Metropolitan University (2004), Japan Society of Civil Engineers (2001, 2002, 2016), Lund University (2000)

TEACHING EXPERIENCE

- Sept. 1, 2005 Mar. 31, 2022 (in Kyoto University): Risk Management Theory, Disaster Economics, Risk Management Theory, Legal Systems for Civil Engineers (for the master course), Public Economics, Engineering Mathematics, Social System Planning Theory, Planning System Analysis, Disaster Prevention Engineering for Society, Seminar on Strategic Thinking on Community-based Management, Natural Disaster Science (for the undergraduate course)
- Apr. 1, 2001 Aug. 31, 2005 (in Tottori University): Exercise in System Planning Theory, Exercise in Infrastructure Planning Theory, Experiment in Applied System Engineering, Social System Engineering Project (for the undergraduate course)

PUBLICATIONS

(Reviewed papers)

- Yokomatsu, M., Mochizuki, J., Joseph, J., Burek, P. and Kahil, T. (2022), "Macroeconomic co-benefits of DRR investment: assessment using the Dynamic Model of Multi-hazard Mitigation CoBenefits (DYNAMMICs) model", Disaster Prevention and Management, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/DPM-07-2022-0154
- Tanaka, T., Yokomatsu, M., Ashino, M., & Ichikawa, Y. (2022). Novel framework for assessing long - term flood risk management pathways focusing on river channel improvement and amenity policies. Journal of Flood Risk Management, e12804. https://doi.org/10.1111/jfr3.12804
- Yokomatsu, M., Park, H., Kotani, H., & Ito, H. (2022). Designing the building space of a shopping street to use as a disaster evacuation shelter during the COVID-19 pandemic: A case study in Kobe, Japan. International journal of disaster risk reduction, 67, 102680. https://doi.org/10.1016/j.ijdrr.2021.102680
- Muneta Yokomatsu, Junko Mochizuki, Julian Joseph, Elizabeth Tellez Leon, Peter A. Burek, "Macroeconomic co-benefits of DRR Investment - Assessment using the Dynamic Model of Multi-hazard Mitigation CoBenefits (DYNAMMICs) Model", United Nations Global Assessment Report (UNGAR) 2022.
- Samaddar, S., Oteng-Ababio, M., Dayour, F., Ayaribila, A., Obeng, F. K., Ziem, R., & Yokomatsu, M. (2021). Successful community participation in climate change

adaptation programs: on whose terms?. Environmental Management, 67, 747-762.

- Yokomatsu, Muneta, and Hitomu Kotani. "Knowledge sharing, heterophily, and social network dynamics." The Journal of Mathematical Sociology 45.2 (2021): 111-133.
- Kotani, Hitomu, Muneta Yokomatsu, and Hideyuki Ito. "Potential of a shopping street to serve as a food distribution center and an evacuation shelter during disasters: Case study of Kobe, Japan." International Journal of Disaster Risk Reduction 44 (2020): 101286.
- Muneta Yokomatsu, Hiroaki Ishiwata, Yohei Sawada, Yushi Suzuki, Toshio Koike, Asif Naseer, Muhammad Jehanzeb Masud Cheema, "A multi-sector multi-region economic growth model of drought and the value of water: A case study in Pakistan", International Journal of Disaster Risk Reduction 43 (2019), 101368
- Hamidazada, Marina, Ana Maria Cruz, and Muneta Yokomatsu. "Vulnerability Factors of Afghan Rural Women to Disasters." International Journal of Disaster Risk Science 10.4 (2019): 573-590.
- Ogawa, Y., Akiyama, Y., Yokomatsu, M., Sekimoto, Y., & Shibasaki, R. (2019). Estimation of Supply Chain Network Disruption of Companies Across the Country Affected by the Nankai Trough Earthquake Tsunami in Kochi City. Journal of Disaster Research, 14(3), 508-520.
- Tomohiro TANAKA, Yutaka ICHIKAWA, Muneta YOKOMATSU and Yasuto TACHIKAWA (2019), Improvement of Flood Risk Curve Development by Considering Dependence of Basin Total Rainfall on its Spatial Concentration, JSCE Journal of Hydraulic Engineering, 75(1), 112-121.
- Kotani, Hitomu, and Muneta Yokomatsu (2019). "Quantitative evaluation of the roles of community events and artifacts for social network formation: a multilayer network model of a community of practice." Computational and Mathematical Organization Theory, 25(4), 428-463
- Muneta Yokomatsu: A Commentary on "Recovery from Catastrophe and Building Back Better (Takeuchi and Tanaka, 2016)"–Structure of Damage of Production Capital Stock on Normative Economic Process, Journal of Disaster Research, 13.3, pp.564-570, 2018. https://doi.org/10.20965/jdr.2018.p0564
- Hiroaki Ishiwata, Muneta Yokomatsu: Dynamic Stochastic Macroeconomic Model of Disaster Risk Reduction Investment in Developing Countries, Risk Analysis, 2018. <u>https://doi.org/10.1111/risa.13144</u>
- Muneta Yokomatsu: Disaster, Infrastructure, Economic growth, and Inequality, JSCE Journal of Infrastructure Planning and Management D3, Vol.73, No.5, pp.1-17, 2017 (in Japanese).

- Takuma Ushiro, Takahiro Sayama, Kaoru Takara, Muneta Yokomatsu: A Study on Cost Benefit and Drought Damage Reduction by a Desalination Plant in Fukuoka Prefecture, Global Environment Engineering Research, Vol.25, pp.141-147, 2017 (in Japanese).
- Hideyuki Ito, Wisinee Wisetjindawat, Muneta Yokomatsu: Is the Government Plan for the Distribution of Relief Goods in the Aftermath of the Nankai Megathrust Earthquake Realistic?, Policy and Practice Studies, Vol.3, No.1, pp31-38, 2017 (in Japanese).
- Hitomu Kotani and Muneta Yokomatsu: Natural disasters and dynamics of "a paradise built in hell": a social network approach, Natural Hazards, Vol.84, No.1, pp.309-333, 2016.
- Tetsuro Kajihara, Muneta Yokomatsu, Hideyuki Ito, and Wisinee Wisetjindawat: Interward, Risk-diversified Allocation Model for Storing of Disaster Relief Goods, Journal of Natural Disaster Science, Vol. 37, No. 1, pp11-33, 2016
- Subhajyoti Samaddar, Muneta Yokomatsu, Frederick Dayour, Martin Oteng-Ababio, Togbiga Dzivenu, Mujeeb Adams and Hirohiko Ishikawa: Evaluating Effective Public Participation in Disaster Management and Climate Change Adaptation: Insights from Northern Ghana Through a User-Based Approach, Risk, Hazards & Crisis in Public Policy, Vol.6, No.1, pp.117-143, 2015.
- Hitomu Kotani and Muneta Yokomatsu: A Role of Ennichi and Jizobon in Nagata Ward, Kobe City and in Expanding Interaction in Local Community - Results of a Social Network Survey in Nagata Ward, Kobe City, Reports of the City Planning Institute of Japan, No.14, pp.91-98, 2015 (in Japanese).
- Hideyuki Ito, Wisinee Wisetjindawat, and Muneta Yokomatsu: Dealing with Relief Supplies for Possible Isolation of Shelters: Discussion on the Current Japanese Practice., Journal of Natural Disaster Science, Volume 36, Number 2, pp53-61, 2015.
- Hitomu Kotani and Muneta Yokomatsu: Local Assets as Artifacts and a Resident's Identity Formation: Category-Selection-Model Approach, JSCE Journal of Infrastructure Planning and Management D1, Vol.71, No.1, pp.10-25, 2015 (in Japanese).
- Hideyuki Ito, Wisinee Wisetjindawat, Muneta Yokomatsu: Efficiency Improvement on Humanitarian Logistics in the Aftermath of a Large-Scale Disaster, Journal of Integrated Disaster Risk Management, Vol.4, No.2, pp.142-155, 2014.
- Shiyu Zhang, Muneta Yokomatsu: Disaster Risk and Effect of Informal Insurance on Human Capital Formation in Rural Areas of Developing Countries, Journal of Integrated Disaster Risk Management, Vol.4, No.2, pp.27-49, 2014.
- Hitomu Kotani and Muneta Yokomatsu: Environmental transformation after Disaster and

Transfiguration Process of Practice in a Community, JSCE Journal of Infrastructure Planning and Management D3, Vol.70, No.5, 2014 (in Japanese).

- Sawai N., Kobayashi K., Apip, Takara K., Ishikawa H., Yokomatsu M., Samaddar S., Juati A. and Kranjac-Berisavljevic G.: Impact of climate change on river flows in the Black Volta River, Journal of Disaster Research, Vol.9, No.4, pp.432-442, 2014.
- Subhajyoti Samaddar, Muneta Yokomatsu, Togbiga Dzivenu, Martin Oteng-Ababio, Mujeeb Rahaman Adams, Frederick Dayour, and Hirohiko Ishikawa: Assessing Rural Communities Concerns for Improved Climate Change Adaptation Strategies in Northern Ghana, Journal of Disaster Research, Vol.9, No.4, pp. 529-541, 2014.
- Hiroyuki Wada, Katsumi Wakigawa, Muneta Yokomatsu, Kimio Takeya: The Role of Macro-Economic Model for Disaster Risk Reduction Policy in Developing Countries, Journal of Integrated Disaster Risk Management, Vol.4, No.1, pp.12-29, 2014.
- Yoshio Kajitani, Muneta Yokomatsu, Hirokazu Tatano, Nario Yasuda: Resilience in Industrial Sector under Power Shortages after the Great East Japan Earthquake, JSCE Journal of Infrastructure Planning and Management, D3, Vol.69, No.5, pp.181-188, 2013 (in Japanese).
- Hitomu Kotani and Muneta Yokomatsu: Inheritance of Local Culture and Disaster: Identity-formation-model Approach, Journal of Integrated Disaster Risk Management, Vol.3, No.1, 2013.
- Tao Ye, Muneta Yokomatsu, Norio Okada: Agricultural Production Behavior under Premium Subsidy: Incorporating Crop Price When Subsistence Constraint Holds, International Journal of Disaster Risk Science, Vol.3, Issue 3, pp.131-138, 2012.
- Shunsuke Segi, Tomoki Ishikura, Muneta Yokomatsu: Application of dynamic stochastic macroeconomic model for long-term disaster prevention planning, JSCE Journal of Infrastructure Planning and Management D3, Vol.68, No.3, pp.129-143, 2012 (in Japanese).
- Makoto Tango, Muneta Yokomatsu, Tomoki Ishikura: Moving Behavior, Used House Market and Policy Effect of Extending the Life Time Expectancy of Residential Housing, JSCE Journal of Infrastructure Planning and Management, D3, Vol.67, No.4, pp.495-509, 2011 (in Japanese).
- Muneta Yokomatsu: On Implementability of Risk Communication in a Neighborhood Association for Community-Based Disaster Prevention Activity, JSCE Journal of Infrastructure Planning and Management, D, Vol.66, No.2, pp.106-124, 2010 (in Japanese).
- Ye, Tao, Muneta Yokomatsu, and Norio Okada: Premium subsidy for crop insurance as an incentive device in China: In which respects might it work wrongly?, Journal of

Natural Disaster Science, Vol.31, No.2, pp.3-12, 2009.

- Wei-Bin Yu, Muneta Yokomatsu and Norio Okada: Contribution of Group Loan to Sustainability of Chinese Agricultural Communities: Collaborative Development of Community Disaster-prevention Infrastructure, The 21st EAROPH (Eastern Regional Organization for Planning & Human-Settlements) World Congress and Mayors' Caucus, at Himeji, Awaji and Hyogo in 2008, CD-Rom, No.6-8, 2008.
- Zhang, Chao, Norio Okada, Muneta Yokomatsu and Yoko Matsuda: Bottleneck Analysis of Disaster Risk Communication Problems Based on Post-disaster Field Surveys -Case Studies of Two Typhoon Disasters in Japan, Journal of Natural Disaster Science, Vol.30, No.1, pp.13-24, 2008.
- Muneta Yokomatsu, Katsumi Wakigawa and Kiyoshi Kobayashi: Households' Liquidity Constraint and Economic Valuation of Disaster Mitigation, JSCE Journal of Infrastructure Planning and Management, Vol.64, No.1, 2008 (in Japanese).
- Muneta Yokomatsu and Kiyoshi Kobayashi: Disaster Insurance, Public Compensation and Housing Choice, Journal of the City Planning Institute of Japan, 2005/No.40, pp.175-180, 2005 (in Japanese).
- Masamitsu Onishi, Muneta Yokomatsu and Kiyoshi Kobayashi: Liquidity Risks and Demands for Earthquake Insurances, JSCE Journal of Infrastructure Planning and Management, No.793/IV-68, pp.105-120, 2005 (in Japanese).
- Kiyoshi Kobayashi, Toshihiko Omoto, Muneta Yokomatsu and Takatoshi Wako: The Contractual Structure and Social Efficiency of Construction Works, JSCE Journal of Infrastructure Planning and Management, No.688/ IV-53, pp89-100, 2001 (in Japanese).
- Toshimori Otazawa, Muneta Yokomatsu and Kiyoshi Kobayashi: Public Guaranty-of-Liabilities and Financial Feasibility of PFI Projects, Journal of the City Planning Institute of Japan, 2001/No.36, pp.937-942, 2001 (in Japanese).
- Muneta Yokomatsu, Toshimori Otazawa and Kiyoshi Kobayashi: Evaluating Economic Loss caused by Project Delay, Journal of the City Planning Institute of Japan, 2001/No.36, pp.925-930, 2001(in Japanese).
- Kiyoshi Kobayashi, Muneta Yokomatsu and Toshimori Otazawa: Sunk Cost and Economic Valuation of Flood Mitigation: Real Option Approach, Advances in River Engineering, Vol.7, pp.417-422, 2001 (in Japanese).
- Muneta Yokomatsu and Kiyoshi Kobayashi: Economic Benefit of Physical Risk Reduction by Disaster Prevention Investment, JSCE Journal of Infrastructure Planning and Management, No. 660/IV-49, pp.111-123, 2000 (in Japanese).
- Kiyoshi Kobayashi and Muneta Yokomatsu: Traffic Behavior Modeling under

Uncertainty – Beyond Expected Utility Theory –, International Association of Traffic and Safety Sciences, Vol.26, No.1, pp.40-47, 2000 (in Japanese).

- Kiyoshi Kobayashi and Muneta Yokomatsu: Frontiers of Economic Valuation of Flood Mitigation: Beyond Expected Losses Paradigms, Advances in River Engineering, Vol.6, pp.237-242, 2000 (in Japanese).
- Kiyoshi Kobayashi and Muneta Yokomatsu: Catastrophe Risks and Economic Valuation of Disaster Prevention Investment, JSCE Journal of Infrastructure Planning and Management, No. 639/IV-46, pp.39-52, 2000 (in Japanese).
- Muneta Yokomatsu and Kiyoshi Kobayashi: The Economic Benefit of Irreversible Risk Reduction by Disaster Prevention Investment, Proc. of IEEE International Conference on Systems, Man and Cybernetics, Vol. V, pp.979-984, 1999.

(Reviewed Proceedings)

- Ishiwata H, Yokomatsu M, Elagaty MAIH, Koike T, Sawada Y, Jaranilla-Sanchez PA, and Suzuki Y.: Two-country computable equilibrium model of international drought risk sharing: the case of Pakistan and the Philippines, The proceedings of the 2017 IEEE International Conference on Systems, Man, and Cybernetics, Banff Center, Banff, Canada, October 5-8, 2017; pp. 3578-3583, 2017.
- Hiroaki Ishiwata and Muneta Yokomatsu: Trade and Disaster Risk Sharing in Open Economy Model, the Proceedings of the 2016 IEEE International Conference on Systems, Man and Cybernetics, October 9-12, Budapest, 2016.
- Hitomu Kotani and Muneta Yokomatsu: Role of Local Festivals on Network Formation among a Variety of Residents in a Community, the Proceedings of the 2015 IEEE International Conference on Systems, Man and Cybernetics, October 9-12, Hong Kong, pp.832-839, 2015.
- Muneta Yokomatsu, Tetsuro Kajihara, Hideyuki Ito, Wisinee Wisetjindawat: Riskdiversified Allocation for Storing of Disaster Relief Goods by Stockpile Sharing Strategy: A Case Study in Japan, the Proceedings of the 2015 IEEE International Conference on Systems, Man and Cybernetics, October 9-12, Hong Kong, pp.598-605, 2015.
- Muneta Yokomatsu, Hiroyuki Wada, Hiroaki Ishiwata, Takeshi Kono, Katsumi Wakigawa: An Economic Growth Model for Disaster Risk Reduction in Developing Countries, the Proceedings of the 2014 IEEE International Conference on Systems, Man and Cybernetics, October 5-8, 2014, San Diego, CA, USA, pp.1584-1591, 2014.
- Bhandari, R. B., Okada, N., Yokomatsu, M., and Ikeo, H.: Analyzing Urban Rituals with Reference to Development of Social Capital for Disaster Resilience: A Case Study

of Kishiwada, Japan, the Proceedings of the 2010 IEEE International Conference on Systems, Man and Cybernetics, Istanbul, Turkey, Oct. 10-13, 2010.

- Ye, Tao, Muneta Yokomatsu, and Norio Okada: Labor Mobility, Goods Tradability, and Efficient Allocation of Disaster Risk, The proceedings of the 2009 IEEE International Conference on Systems, Man, and Cybernetics, Oct 11-14, San Antonio, Texas, USA, 1992-1997, 2009.
- Tao Ye, Muneta Yokomatsu and Norio Okada: Combined International and Intergenerational Disaster Risk Diversification -- An Innovative Instrument for Government Intervention into the Private Disaster Insurance Program, The Proceedings of the 2008 IEEE International Conference on Systems, Man, and Cybernetics, pp. 2887-2894, 2008.
- Seiki Ochi, Ueda, Takayuki and Muneta Yokomatsu: Knowledge and Skill for Infrastructure Technology, Selected Proceeding of 11th Uddevalla Symposium 2008 on Spatial Dispersed Production and Network Governance, pp.537-552, 2008.
- Muneta Yokomatsu, Yu Wei-Bin, and Norio Okada: Micro Credit, Transaction of Farmland Management Right and Diversification of Disaster Risk in Agricultural Villages in China, the Proceedings of the 2007 IEEE Systems, Man, and Cybernetics Conference, CD-Rom, pp.1776-1781, 2007.
- Masamitsu Onishi, Muneta Yokomatsu, Kiyoshi Kobayashi: Liquidity Risks and Demands for Earthquake Insurances, Proceedings of the 2005 IEEE Systems, Man, and Cybernetics Conference, pp.221-226 (CD-ROM), 2005.
- Muneta Yokomatsu and Kiyoshi Kobayashi: Insurance vs. Compensation for Disaster, Proceedings of the 2004 IEEE Systems, Man, and Cybernetics Conference, pp.1030-1037, 2004.
- Muneta Yokomatsu, Ryo Ejiri and Kiyoshi Kobayashi: Economic Accounting Information for Infrastructure Management, Proceedings of Infrastructure Planning, Vol.21, No.1, pp.155-166, 2004 (in Japanese).
- Muneta Yokomatsu: Issues and Problems in Regional Allocation of Natural Disaster Risk, Proceedings of Infrastructure Planning, Vol.20, No.1, pp.17-32, 2003 (in Japanese).
- Muneta Yokomatsu and Kiyoshi Kobayashi: Fiscal Policy for Disaster Risk Management and International Externality, Proceedings of 2003 IEEE International Conference on Systems, Man & Cybernetics, pp.4419-4424, 2003 (in Japanese).
- Muneta Yokomatsu and Kiyoshi Kobayashi: Financial Procurement for Recovery from Disaster, Proceedings of Infrastructure Planning, Vol.19, No.2, pp.265-274, 2002 (in Japanese).
- Kiyoshi Kobayashi and Muneta Yokomatsu: Disaster Risk Management and Economic

Evaluation, Proceedings of Infrastructure Planning, Vol.19, No.1, Invited paper, pp.1-12, 2002 (in Japanese).

- Muneta Yokomatsu, Kiyoshi Kobayashi and Kazuo Tanaka: Decentralized Mitigation and Regional Allocation of Disaster Risk, Proceedings of Infrastructure Planning, Vol.18, No.2, pp275-286, 2001 (in Japanese).
- Hideyuki Kita, Keishi Tanimoto and Muneta Yokomatsu: On the Maximum Design Earthquake in Disaster Prevention Planning, Proceedings of 2001 IEEE International Conference on Systems, Man & Cybernetics, pp.1258-1263, 2001.
- Muneta Yokomatsu and Kiyoshi Kobayashi: The Optimal Regional Allocation of Disaster Risk by Jurisdiction—Managed Insurance, Proceedings of Infrastructure Planning, No. 17, pp.369-380, 2000 (in Japanese).

(Book Chapters with Peer Review)

- Hirokazu Tatano et al. "Evaluating Current Research Status and Identifying Most Important Future Research Themes", in H. Tatano and A. Collins (eds.) "Proceedings of the 3rd Global Summit of Research Institutes for Disaster Risk Reduction", Springer, Singapore, 2021.
- Yokomatsu, Muneta, and Stefan Hochrainer-Stigler. "Introduction." in M. Yokomatsu and S. Hochrainer-Stigler (ed.) "Disaster Risk Reduction and Resilience", Springer, Singapore, 2020. 1-7.
- Yokomatsu, Muneta, and Kiyoshi Kobayashi. "Disaster Risk and a Household's Dynamic Asset-Formation Behavior: Jump Control Model of Household." in M. Yokomatsu and S. Hochrainer-Stigler (ed.) "Disaster Risk Reduction and Resilience", Springer, Singapore, 2020. 91-113.
- Yokomatsu, Muneta, and Stefan Hochrainer-Stigler. "Discussion and Outlook for the Future." in M. Yokomatsu and S. Hochrainer-Stigler (eds.) "Disaster Risk Reduction and Resilience", Springer, Singapore, 2020. 231-236.
- Samaddar S., Ayaribilla A. J., Oteng-Ababio M., Dayour, F., and Yokomatsu M.: Stakeholders' perceptions on effective community participation in climate change adaptation, in A. Sarkar, S. R. Sensarma, G. Vanloon (ed.) "Sustainable solutions for Food Security: Combating Climate Change by Adaptation", p. 355-379, Springer, Cham.
- Samaddar S., Yokomatsu M., Dayour F., Oteng-Ababio M., Dzivenu T., and Ishikawa H.: Exploring the role of trust in risk communication among climate induced vulnerable rural communities in Wa West district, Ghana, in K. Takeuchi, O., Saito, E., Gyasi and G. Kranjac-Berisavljevic (ed.) "Strategies for Building Resilience against Climate and Ecosystem Changes in Sub-Saharan Africa. Science for Sustainable Societies", Springer, Singapore, pp 247–264, 2017.

- Masahiko Gemma, Muneta Yokomatsu, Rodney Smith, Ayu Washizu, Koichi Takase: Estimation of Economic Effects of Market Transaction – Socio-economic Impacts of Transaction of Water Right and Output Quota, in Horiguchi K. (ed.) "Renewable Resources and Valuable Transaction in Market", Chapter 10, pp.259-302, Ochanomizu Shobo, 2014 (in Japanese).
- Ochi, S., Ueda, T., Yokomatsu, M.: Knowledge and Skill for Infrastructure technology and economic growth, Karlsson C., Johansson, B., Kobayashi, K., Stough, R.R. (ed.), "Knowledge, Innovation and Space", Chapter 6, pp.139-159, Edward Elgar, 2014.
- Tao Ye, Muneta Yokomatsu, Peijun Shi and Norio Okada: Government Intervention into Disaster Insurance Market: Issues and Alternatives in Japan and China, in Suman Ranjan Sensarma and Atanu Sarkar (ed.), "Disaster Risk Management: Conflict and Cooperation", Chapter 8, pp162-191, New Delhi: Concept Pub. Co., 2013.
- Muneta Yokomatsu, Wei-Bin Yu and Norio Okada: Institutional Innovation and disaster Risk Management in Agricultural Communities in China, in Suman Ranjan Sensarma and Atanu Sarkar (ed.), "Disaster Risk Management: Conflict and Cooperation", Chapter 2, pp19-58, New Delhi: Concept Pub. Co., 2013.
- Muneta Yokomatsu, Kiyoshi Kobayashi and Ryo Ejiri: Formulating an Infrastructure Accounting System, in Karlsson C., Anderson, W.P., Johansson, B., Kobayashi, K. (ed.), "The Management and Measurement of Infrastructure", Chapter 14, pp. 301-328, Edward Elgar, 2007.
- Muneta Yokomatsu: Risk Management of Local Assets, in Tanaka, N. and Shibata H. (ed.), "Civil Engineering and Landscape Design and Management for Landscape", Chapter 4, pp.115-158, Gakugei Shuppansha, 2007 (in Japanese).
- Muneta Yokomatsu and Akiyoshi Takagi: Research Issues and Perspective of Economic Analysis of Disaster Prevention, in Tatano, H. and Takagim A. (ed.), "Economic Analysis of Disaster Prevention", Chapter 18, pp.315-333, Keiso Shobo, 2005 (in Japanese).
- Muneta Yokomatsu: Economic Valuation of Recovery Policies, in Tatano, H. and Takagim A. (ed.), "Economic Analysis of Disaster Prevention", Chapter 17, pp.293-312, Keiso Shobo, 2005 (in Japanese).
- Muneta Yokomatsu: Decentralized Disaster Risk Management in a Multi-Region Economic System, in Tatano, H. and Takagim A. (ed.), "Economic Analysis of Disaster Prevention", Chapter 9, pp.258-275, Keiso Shobo, 2005 (in Japanese).
- Muneta Yokomatsu: Catastrophe Risks and Economic Valuation of Disaster Prevention Investment, in Tatano, H. and Takagim A. (ed.), "Economic Analysis of Disaster Prevention", Chapter 2, pp.22-48, Keiso Shobo, 2005 (in Japanese).

(Book)

- Yokomatsu, Muneta, and Stefan Hochrainer-Stigler (Eds.): Disaster Risk Reduction and Resilience, 2020, Springer.
- Tomoki Ishikura and Muneta Yokomatsu: *Economics of Infrastructure Project Evaluation*, Corona Publishing, 2013 (in Japanese).

CURRENT INTEREST

- Quantitative analysis of economic growth and distribution under climate-change-related disasters
- Economic valuation of natural hazards and disaster risk reduction
- Social network analysis of communities