Tokyo Metropolitan University
Graduate School of Urban Environmental Sciences

Department of Urban Science Annual Report for FY 2017

■Staff List of the Department of Urban Science

Shin AIBA, Associate Professor
Taro ICHIKO, Associate Professor
Fumiko ITO, Professor
Motoki NAGANO, Associate Professor
Hiroyuki ONEYAMA, Professor
Yoko SUGIHARA, Associate Professor
Hidenori TAMAGAWA, Professor
Kahoruko YAMAMOTO, Associate Professor

Prof. Oneyama is also a member of the Department of Civil & Environmental Engineering. Please refer to its site as for his report.

≪Shin AIBA≫

1) Staff

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2) Overview of Research Activities in FY 2017

Study on reconstruction from disaster Shin AIBA

I studied on reconstruction plans and projects from Great East Japan earthquake. I supported to plan reconstruction projects and conducted an experiment to leave lessons and memories of disaster in Ryori village, Ofunato city. Results were published on academic magazines.

Urbanism on population decreasing age Shin Aiba

I discussed and examined a theory of urban planning and design on population decreasing age. I gave advices on making city plan to some local government (Fukushima city and Hino city). And I also conducted a planning project to utilize abandoned house in a district of Hino city. Results are published on some articles.

Comparative study on machizukuri in east Asian countries Shin Aiba

I researched community design projects in Republic of China comparing policy, history and practice of machizukuri in Japan, Taiwan and Korea.

Technologies to support machizukuri Shin AIBA

I develop technologies to support discussion and consensus building by citizens. I develop a workshop method to support to build a system of "Area management" by citizens in Harumi district Chuo city.

3) List of Research Activities in FY 2017

- 1. Peer-reviewed papers
- 2. Proceedings of oral presentations
- 3. Others
- 3-1. Technical books

As co-author

David De La Pena (Ed), Shin AIBA et al 「Board game of Life」 Design As Democracy: Techniques for Collective Creativity, Island Pr., 2017.12

≪Taro ICHIKO≫

1) Staff

Taro ICHIKO

Professor/ Doctor of Urban Science

Urban planning for hazard mitigation, Community-based Disaster Management, Risk Management

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2) Overview of Research Activities in FY 2017

(1) Research for a long-term recovery of housing and village from the great east Japan earthquake in 2011

Six years have passed since the great east Japan earthquake in 2011. Our research are focused on the long-term recovery. In 2011 tunami disaster, housing relocation projects were major measures for housing recovery. It took long time to be finished.

We are dedicating a housing-relocating project in Kesennuma, Miyagi. In fiscal year 2017, some depth interview were done for survivors.

(2) A study of a pre-disaster planning for post-disaster recovery

Disaster mitigation which means not only reducing disaster losses by pre-activities but also preparing for resilient recovery have been becoming more important for counter measures on for Tokyo capital earthquake. Those programs for pre-disaster recovery from a view of the planning theory is developed as a pre-disaster planning for post-disaster recovery. We also have been dedicating those programs accompanying with Tokyo Metropolitan Government and local municipalities.

In fiscal year 2017, community workshops for post-disaster recovery in Nagasaki123, Toshima-ward were managed and delivered. Adding to that, an action research on the 19th municipal staff training for a long-term recovery by TMG was done.

(3) A study of disaster management as an aspect of gender equality

After the east Japan earthquake, refugee support as an aspect of gender equality has been becoming important. In this study, surveys of women's life and livelihood recovery after the Tohoku disaster were conducted. And workshops for the disaster mitigation for gender equality were managed in Katsushika city.

3) List of Research Activities

1. Peer reviewed paper

2. Oral presentation

≪Fumiko ITO≫

1) Staff

Fumiko ITO

Professor / Dr. Eng.

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2) Overview of Research Activities in FY 2017

1 Environment of urban area and residential area

Fumiko Ito

The condition of the city, citizen's evaluation of environment and the relationship between those are analyzed to get suggestion for creating comfortable residential environment.

Following topics were researched in 2017FY.

i) Experimented Method for Impression Evaluation Using HMD of Street Sequence,

- ii) Typology of Tourists' Spatio-Temporal Activities Using the Sequence Alignment Method,
- iii) Mathematical approach for planning the Consolidation of Public Facilities.

2 Housing choice, living behavior of resident

Fumiko Ito

Housing choice and living behavior of residents are analyzed to clarify the demand of residential service. Relationship between residential environment and health of children and parents are analyzed by Structural equation modeling method. Following topic was researched in 2017FY.

i) Structural Equation Modeling of Relationships among Residential Environment and Health in Families with Children.

3) List of Research Activities in FY 2017

1. Refereed papers

Kawase, J, Ito, F (2017) 'Usefulness and Issues of Typology of Tourists' Spatio-Temporal Activities Using the Sequence Alignment Method', "Society for Tourism Informatics," Vol. 13, No. 1, pp. 69-82. (in Japanese)

2. Proceedings of Oral Presentations

Okada, M., Ito, F (2017) 'The Progress and Significance of the Consolidation of Public Facilities since the Merger of Municipalities in Japan', "2017 Exchange workshop between Tokyo Metropolitan Univ. - Univ. of Seoul."

Taki, T, Nishio, S, Ito, F (2017) 'Selection of Snow Removal Route in the Minimum Cost Using the Minimum Steiner Tree', "Summaries of Technical Papers of Annual Meeting," the Architectural Institute of Japan, pp.897-898. (in Japanese)

3. Others

3-3. Research Reports / Papers

Ito,F, Sato,R, Oneyama,H (2017) 'Relation between Purpose and Frequency of User of

Tokyo Metropolitan Bus', "Papers and Proceedings of the GIS Association of Japan," Vol.26,D-2-4. (in Japanese)

Nishio,S, Ito,F (2017) 'Proposal for Sky Factor Calculation System Using Google Street View', (Special Feature: Big Data in Real Estate and Real Estate Tech), "The Japanese Journal of Real Estate Sciences," Vol.31, No.1, pp52-57. (in Japanese)

4) Funded Research Projects (Competitive Research Funds, etc.)

4-1.KAKENHI (Grant-in-Aid for Scientific Research)

Grant-in-Aid for Scientific Research S. 'Residential Environment Effect on Brain, Circulatory, Respiratory and Motile Organ: benefit evaluation of disease prevention', (Principal-Investigator: Professor Ikaga, T., Keio University), 2017-2021, Co-Investigator.

4-2.Others

Research Foundation of Japan Institute of Country-ology and Engineering. 'Research of the Coordinated Maintenance of Network-based Facility and Building-based Facility' 2017.2-2018.3, Principal Investigator.

Commissioned Survey Research, Japan Society for the Promotion of Science 'Academic Research Trend on Urban Planning: The Application and Development of Urban Analysis, Spatial Information Science and the Associated Subjects Related to the Formation of Urban Environment' 2017.4-2018.3, Principal Investigator.

Priority Allocation of Research Funds (for the Entire University) at the Discretion of the President. 'Multilateral Research on Accessibility of the Olympic and Paralympic venues, and, their Universal Design and Continuous Use of Venue Facilities' (Research director: Yosikawa, T.), 2017-2018.3, Co-Investigator.

≪Motoki NAGANO ≫

1) Staff

Motoki NAGANO

Associate Professor / M.A. Political Science

Urban Administration, Local Governance

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2) Overview of Research Activities in FY 2017

Citizen participation in urban governance

I investigated the policymaking dynamics of Japanese municipal governments and citizen participation in these processes, focusing on two issues. First, I examined the structure of local assemblies and recent trends in reformation by a nationwide mail questionnaire survey. Second, I investigated the dynamics of planning and review processes at the local executive branch level, observing and participating as an advisory committee member in several municipalities.

3) List of Research Activities in FY 2017

1. Peer-reviewed papers

2. Proceedings of oral presentations

Motoki Nagano, "Recent trends and their structure of municipal assembly reformation in Japan," *Public Policy Studies Association Japan Annual Convention 2017*, June 2017, Toyama, Toyama, University of Toyama [in Japanese].

Motoki Nagano, "Brief on the results of the annual progress survey on local-assembly reformation in Japan 2017," 17th Citizens and Councilors Conference for the Creation of Municipal Ordinances 2017, July 2017, Ichigaya, Tokyo, Hosei University. [in Japanese]

3. Others

3-1. Technical books

As co-author

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Masaharu Kouda (ed.), *Local Autonomy in Japan: Transition and Future*. Horitsu Bunka Sha Ltd., Kyoto, March 2018 [in Japanese].

Specific contributions

<u>Motoki Nagano</u>, "Chap. 6 Local government planning system: Mechanism and process," pp. 127-153, in *ibid*. [in Japanese].

Katsuya Hirose (ed.), Originality and Universality of Japanese Municipal Assemblies' Reformation Movements. Hosei University Press, Tokyo, March 2018 [in Japanese].

Specific contributions

<u>Motoki Nagano</u>, "Chap. 2 Transformation of municipal assemblies: Statistical perspectives," pp. 12-41, in *ibid*. [in Japanese].

3-2. Research reports/papers

As co-author

Mid-term report of the investigative commission on the future salary and other issues of the town and village assembly members. National Association Chairmen of Town and Village Assemblies, Tokyo, March 2018 [in Japanese].

Specific contributions

Motoki Nagano, "Chap. 2 Brief and analysis report of the national survey," pp.8-23, in *ibid*. [in Japanese].

- 3-3. Monographs
- 3-4. Commentary/essays

Motoki Nagano, "Effective Monitoring of Municipal Policy Formative Legislatures Set by Local Councilors" *Local Autonomy Daily (Jichinippo)*, November 2017 [in Japanese].

- 3-5. Book review
- 3-6. Panel Invitations

<u>Motoki Nagano</u>, "Panel Discussion: Recent trends and future of the citizen deliberation meetings".
10th Citizen Deliberation Meeting Fair, Mitaka Collaboration Center, Tokyo, March 2018 [in Japanese].

4. Grants-in-Aid for Scientific Research

(KAKENHI)

Principal Investigator, Scientific Research (C), No.17K03547, "Negotiation and consultation mechanisms between Tokyo metropolitan government and ward governments after decentralizing reforms in the fiscal year 2000." 2017-2019 FY, 4,160,000JPY.

Co-Investigator, Scientific Research (B), No. 26285033, "Explicating originality and universality of Japanese municipal assemblies' reformation movements." 2014-2017 FY.

5. Lectures

Motoki Nagano, "Municipal assembly reformation: Structure and future of assembly-citizen collaboration," *Tochigi Prefectural Association Chairmen of Town and Village Assemblies*, Workshop for Chairmen of Town and Village Assemblies of Tochigi Prefecture, Tochigi Prefectural Government Personnel's Hall of the Mutual Aid Association of Prefectural Government Personnel, June 2017 [in Japanese].

Motoki Nagano, "Municipal Assemblies' Efforts for Better Policy Management," *Institute of General Research for Local Assemblies*, Workshop for Local Councilors and Assembly Personnel on Reliable Policy Management for Better Municipal Governance,

ATTO Business Center of Ikebukuro Station Annex, October 2017 [in Japanese].

Motoki Nagano, "How should Municipal Governments Incorporate Citizens' Deliberation Effectively into Policy Management?" *Institute of General Research for Local Assemblies*, Workshop for Local Councilors and Assembly Personnel on Responsible Policy Management for Better Municipal Governance, ATTO Business Center of Ikebukuro Station Annex, October 2017 [in Japanese].

6. Awards

7. Media comments

"Only half of municipal assemblies' informal conferences of all members open to the public," *Yomiuri Shimbun* (East Ibaraki area, Tokyo edition), July 8, 2017 [in Japanese].

"Political affairs activity expenditure: 18 municipalities to not allow councilors," *Yomiuri Shimbun* (East Ibaraki area, Tokyo edition), September 21, 2017 [in Japanese].

≪Yoko SUGIHARA≫

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2) Overview of Research Activities in FY 2017

1. The impact evaluation of the reformed of the National Long-Term Care Insurance (LTCI) system on the elderly people and their family caregivers.

We examined the multifaceted impacts of the reformed of the Japanese LTCI system on elderly people and their family caregivers, based on the surveys conducted in a municipality of Tokyo metropolis. We explored the following research questions: (1) The impacts of the increase in self-pay ratio for care services covered by LTCI on impaired elderly persons and family caregivers. (2) The psychological burden of medical care at home among family caregivers of impaired elderly persons. (3) The differences in long-term care preference among elderly Japanese by age, period, and cohort.

2. A study on promoting support for the district welfare commissioners.

Factors promoting or inhibiting the willingness to continue working as district welfare commissioners who support community welfare was investigated. Questionnaires were sent by mail to all district welfare commissioners serving 2 – 3 terms in all the wards and cities of Tokyo. The response rate in the survey was 69.5% (N = 1,346). Results of structural equation modeling showed (1) positive feelings such as psychosocial rewards of their activities were strongly related to the willingness to continue working as district welfare commissioners compared to negative feelings such as role strain. (2) Role ambiguity was related to the decline in the willingness to continue working compared to role overload and role conflict. (3) Support from formal and professional organizations had indirect effects on the willingness to continue working, which was mediated by the increase in psychosocial rewards and the decrease in role

ambiguity. These results suggest the importance of management that decreases role ambiguity and increases psychosocial gains including the sense of worth, as well as emotional, instrumental, and informational support from the public and professional organizations.

3. A study on the mechanisms and the regulated factors of multi-layered social disadvantages among Japanese older adults.

Based on the data obtained from the nationwide survey and two regional survey in Tokyo metropolitan area (Setagaya and Sumida wards), we investigated the mechanisms and the regulated factors of multi-layered social disadvantages among Japanese older adults. We explored the following research questions: (1) Association between socioeconomic status and self-rated health / activities of daily living among Japanese older people. (2) Differences in the association between socioeconomic status and health by age, period and birth cohort. (3) Psychosocial mediators between socioeconomic status and physical activities. (4) Job demands, coping resources, and job satisfaction among older employed men in Japan. (5) Perceived neighborhood environment, social support, and physical activity among elderly Japanese.

3) List of Research Activities in FY 2017

1. Peer-reviewed papers

- Yoko Sugihara. (2018). Willingness to continue working as district welfare commissioners in Tokyo: The roles of psychosocial rewards, role strain, and support. *Japanese Journal of Public Health*, in Press. (in Japanese).
- Hidehiro Sugisawa, Ken Harada, Yoko Sugihara, Shizuko Yanagisawa, & Masaya Shimmei. (2018). Socioeconomic status disparities in late-life disability based on age, period, and cohort in Japan. *Archives of gerontology and geriatrics*, 75, 6-15.
- Ken Harada, Hidehiro Sugisawa, Yoko Sugihara, Masaya Simmei, & Shizuko Yanagisawa. (2018). Social support, negative interactions, and mental health: Evidence of cross-domain buffering effects among younger and older adults in Japan. *Research on Aging*, 40(4), 388-405.
- Masaya Shimmei, Hidehiro Sugisawa, Yoko Sugihara, Ken Harada, & Shizuko Yanagisawa. (2017). Generational differences in relationships between political efficacy and participation in community organization. *Japanese Journal of Gerontology*, 7, 31-44. (in Japanese).

2. Proceedings of Oral Presentations

- Yoko Sugihara. Factors relating to satisfaction and motivation of district welfare commissioners in Japan. The 21st International Association of Gerontology and Geriatrics World Congress. 2017.7.23-27. San Francisco.
- Hidehiro Sugisawa, Ken Harada, Yoko Sugihara, Shizuko Yanagisawa, & Masaya Shimmei. Psychosocial mediators between socioeconomic status and physical activity in Japanese adults. The 21st International Association of Gerontology and Geriatrics World Congress. 2017.7.23-27. San Francisco.
- Ken Harada, Hidehiro Sugisawa, Yoko Sugihara, Masaya Simmei, & Shizuko Yanagisawa. Perceived neighborhood environment, social support, and physical activity among elderly Japanese. The 21st International Association of Gerontology and Geriatrics World Congress. 2017.7.23-27. San Francisco.
- Yoko Sugihara. The impacts of the increase in self-pay ratio for care services covered by the national long-term care insurance on impaired elderly persons and their family caregivers. Japanese Society for the Study of Social Welfare 65th Annual Scientific Meeting. 2017.10.21-22. Tokyo. (in Japanese).
- Yoko Sugihara, Hidehiro Sugisawa, Yumiko Shimizu, & Yukako Koike. The psychological burden of medical care at home among family caregivers of elderly persons in Japan. Japanese Society of Public Health 76th Annual Scientific Meeting. 2017.10.31-11.2. Kagoshima. (in Japanese).
- Taro Fukaya, Yoko Sugihara, Hidehiro Sugisawa, & Erika Kobayashi. Association between utilization of internet and life satisfaction among elderly Japanese.

 Japanese Society for the Study of Social Welfare 65th Annual Scientific Meeting. 2017.10.21-22. Tokyo. (in Japanese).
- Yumiko Shimizu, Yoko Sugihara, Hidehiro Sugisawa, & Yukako Koike. Health literacy and informational support among the frail elderly persons in Japan. Japanese Society of Public Health 76th Annual Scientific Meeting. 2017.10.31-11.2. Kagoshima. (in Japanese).
- Hidehiro Sugisawa, Yoko Sugihara. Long-term care preference among Japanese older adults: differences by age, period, and cohort. Japanese Society of Public Health 76th Annual Scientific Meeting. 2017.10.31-11.2. Kagoshima. (in Japanese).
- Hidehiro Sugisawa, Ken Harada, Yoko Sugihara, Shizuko Yanagisawa, & Masaya Shimmei. Association between children's experience of socioeconomic disadvantage and adult health: a life-course perspective. Japan Socio-Gerontological Society 59th Annual Scientific Meeting. 2017.6.15-16. Nagoya. (in Japanese).
- Ken Harada, Hidehiro Sugisawa, Yoko Sugihara, Masaya Simmei, & Shizuko

Yanagisawa. Perceived age discrimination and job satisfaction among older employed men in Japan. Japan Socio-Gerontological Society 59th Annual Scientific Meeting. 2017.6.15-16. Nagoya. (in Japanese).

3. Others

3-3. Monographs

Yoko Sugihara. (2018). Book review. "Social network and subjective well-being: Human relationships from Sociometrics. (by Ken Harada)". *Journal of Urban Policy Studies*, in press. (in Japanese).

Yoko Sugihara. (2018). Self-neglect of elderly people in urban areas. *Journal of Urban Social Studies*, 10, 45-58. (in Japanese).

3-4. Others (Speech)

Yoko Sugihara. Social welfare for the elderly people. The first time training seminar for district welfare commissioners. 2017.8.21. (in Japanese).

4. Grants-in-Aid for Scientific Research

(KAKENHI)

- Scientific Research (B) [Principal investigator]. The impact evaluation of the reformed of the National Long-Term Care Insurance system on elderly people and their family caregivers: consideration of support system for preventing social exclusion. 2017-2020 FY, 4,400,000 JPY.
- Scientific Research (A) [Co-investigator (kenkyu-buntansha)]. A study on the mechanisms and the regulated factors of multi-layered social disadvantages among Japanese older adults. 2014-2017 FY, 100,000 JPY.
- Scientific Research (A) [Co-investigator (renkei-kenkyusya)]. The probability for frailty and socioeconomic disparities in health among Japanese older adults: Evidence from the national longitudinal survey. 2017-2019 FY.
- Scientific Research (B) [Co-investigator (renkei-kenkyusya)]. Balance and conflicts in paid work, unpaid work at home, and community activities among elderly people. 2017-2019 FY.

≪Kahoruko YAMAMOTO≫

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2) Overview of Research Activities in FY 2017

1. Urban Sociological Study on Social Structural Changes and Reconstruction of Urban Inner Area in Yokohama, Japan

The Study has been focused on social structural changes in urban inner areas, focusing on the issues below; 1) change in industrial structures with Globalization and post-industrialization, 2) town development plan engaged by public administration and NPOs, 3) activities of local supportive organizations. The academic aim is to clarify 1) how these three points affect over changes and reconstructing of local communities, and 2) how social lives of residents have changed.

2. Urban Sociological Study on Social Structural Changes and Reconstruction of Urban Inner Area in Vancouver, Canada

The Study has been conducted in Downtown Eastside, the low-income neighbor in Vancouver, Canada. The research has been focusing on how gentrification impacts to a local community and their activities.

3. Research on Social Condition of the Evacuees from Fukushima

As a research group, we have conducted interviewing research to bring out the social condition of the evacuees from Fukushima, especially from Tomioka Town.

3) List of Research Activities in FY 2017

1. Publication

Koichi HASEGAWA & Kahoruko YAMAMOTO, 2017, The Fukushima Nuclear Disaster.

Evacuation from the Disaster-stricken Area and Possibility of the Energy Shift (Sociological Perspective on Tohoku Disaster-stricken Area Vol. 1), Tokyo: Yuhikaku. (Japanese)

<u>Kahoruko YAMAMOTO</u>, 2018, 'Supportive Activities for the Homeless and the Low-income and Community Economic Development in Vancouver, Canada', Research Paper for KAKENHI (2015-2017). (Japanese)

2. Proceedings of Oral Presentations

<u>KahorukoYAMAMOTO</u>, 'Anti-gentrification activities and Community Economic Development in an Inner Urban Area: A Case of Vancouver, Canada', The Annual Conference of the Japan Research Society of Regional and Community Studies in Akita Prefectural University, May 13rd, 2017. (Japanese)