

Agenda for Urban Farmland Conservation and Green Infrastructure Development in a Sprawled Suburban City in Tokyo, Japan

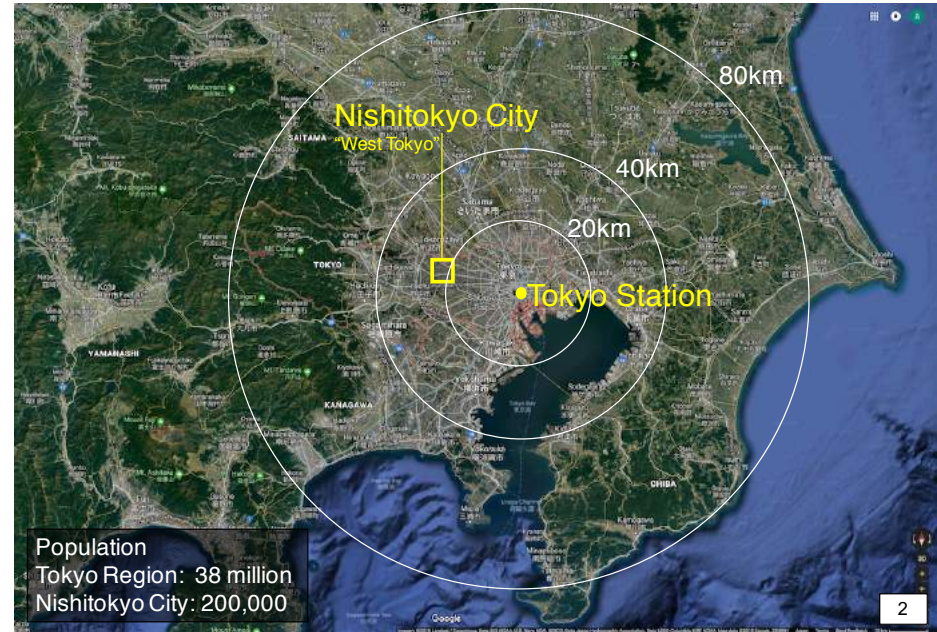


Akito Murayama
Associate Professor, Department of Urban Engineering,
School of Engineering, The University of Tokyo
murayama@up.t.u-tokyo.ac.jp

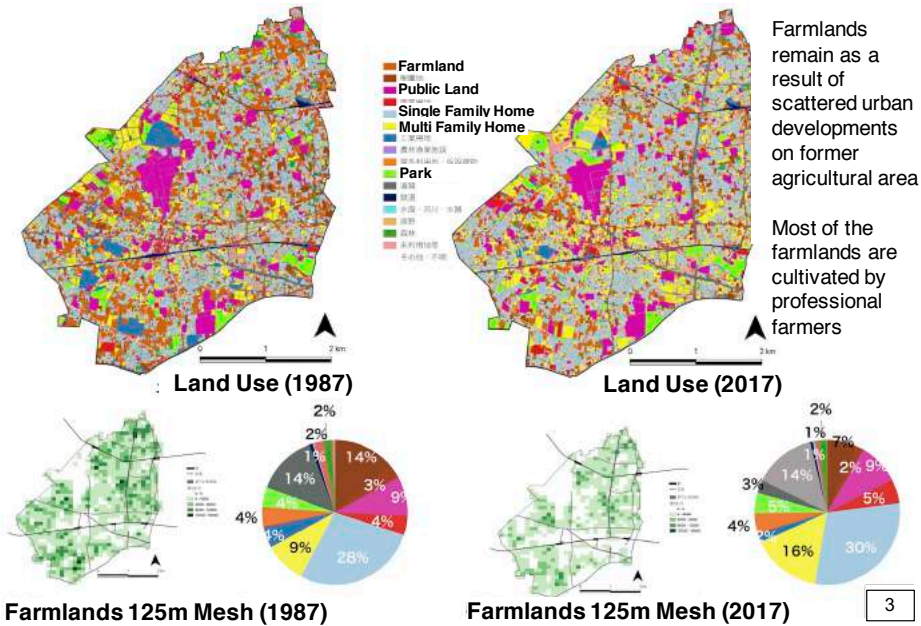
Akiko Iida
Project Assistant Professor, Department of Urban Engineering,
School of Engineering, The University of Tokyo

July 5, 2019 | The 10th International Association for Landscape Ecology Congress (IALE 2019)
Università degli Studi di Milano-Bicocca, Milan, Italy

Tokyo Region and Nishitokyo City



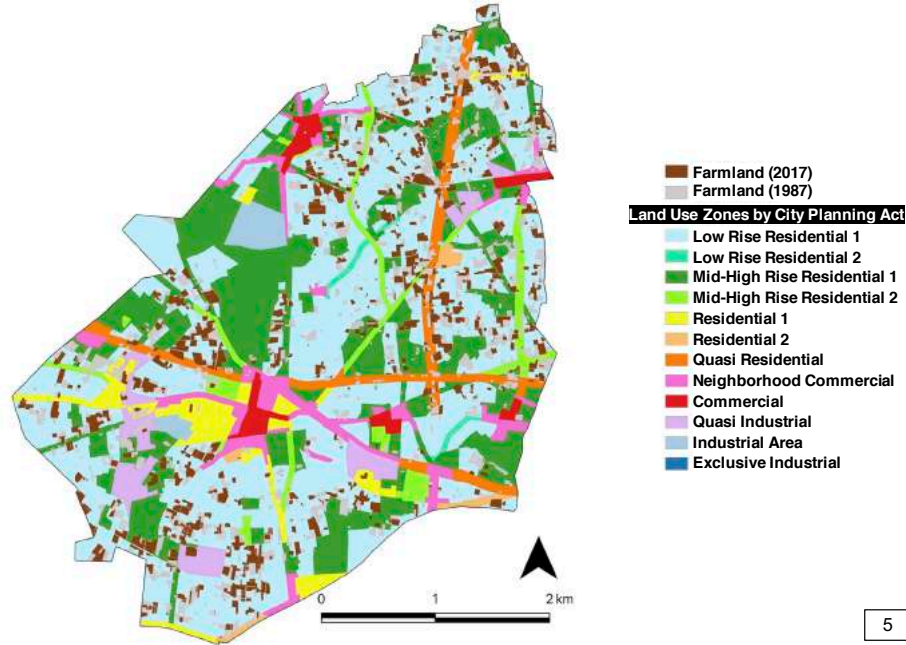
Nishitokyo City Land Use | Residential and Agricultural Mix



Nishitokyo City Land Use | Residential and Agricultural Mix



Nishitokyo City Land Use Zoning and Farmlands



5

Re-Evaluation of Scattered Urban Farmlands

- Urban planners used consider the scattered urban farmlands as a failure of modern urban planning
- Recently, there are views to re-evaluate the situation in a positive way
- Farmlands close in residential areas offer various benefits to urban dwellers
- Intensive discussion in Nishitokyo City Planning Committee



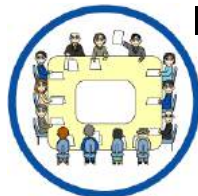
Nishitokyo City Planning Committee

- Advisory committee to the city mayor on urban planning issues
- Zoning change, district vision and plan, designation and removal of Productive Green Zones (PGZ)
- Usually procedural and not innovative
- Protection of PGZ and other farmlands is a big issue
 - Working group to propose innovative ideas to balance farmland conservation and housing development
 - Murayama as chair of the working group
 - Almost no budget! > collaboration with university studio works



Productive Green Zones (PGZ):
 Urban farmlands mostly protected by 2022

7



City Planning Committee

- Academics (Urban Planning)
- Agricultural Industry
- Retailors
- Police / Fire Departments
- Community Leaders
- Volunteer Citizens
- City Council Members



Nishitokyo Studio 2017 Shaping Ecodistricts in the Tokyo Suburbs Urban Farmland and Green Space Conservation in the Regeneration of Sprawled Urban Areas

Urban Project Studio
 The University of Tokyo
 October 2017 - January 2018

Master Thesis Atelier
 Politecnico di Torino
 October 2017 - January 2018

On-Site Workshop
 UTokyo and PoliTo
 March 2018



8

Proposal to the City Mayor on Urban Farmland Conservation and Value Creation

1. Current conditions of urban farmland and urban farming

- Decrease of urban farmlands and progress of land use transformation
- Release of Productive Green Zones (PGZs) and “2022 problem” when the 30 years designation of PGZs will expire
- Condition of farming and real estate management of the farming families: they rely on real estate businesses (sale or rental of their lands/buildings) for their income
- Communications (including conflicts) between urban farmers and dwellers
- Collaboration with park and green space measures in the city government

2. Benefits of urban farmlands

- Conservation of cultural landscape
- Promotion of citizens' health through fresh foods and recreational/educational opportunities
- Enhancement of ecosystem services such as climate mitigation, flood prevention and disaster risk reduction
- Development of alternative food system

9

Proposal to the City Mayor on Urban Farmland Conservation and Value Creation

3. Measures for urban farmland conservation

- Connecting housing development and urban farmland conservation
- Visioning of a new residential and agricultural mixed urban space
- Promoting communication between farmers and non-farmers
- Creating a business model for farmers and farmland owners

4. Model projects and programs

- Construction of various model housing with private farmlands (detached houses, townhouses and apartments)
- Introduction of rental farmlands to residents of local communities and remote urban areas
- Renovation of factories and warehouses with rooftop farmlands and organic restaurants
- Promotion of agri-lifestyle
- Support for young entrepreneurs
- Establishment of district-scale management organizations

10

Publicizing the Proposal on Urban Farmland Conservation



Upper 3 Photos: Skylark Times <https://www.skylarktimes.com/?p=16046>

The proposed agenda was formalized as a proposal to Nishitokyo City mayor from the city's urban planning committee and is expected to change the existing planning policies and introduce new projects and programs associated with urban farmland conservation and green infrastructure development.

11



Claudia Cassatella and Akito Murayama eds (2018) : <http://hdl.handle.net/11583/2712031>