Exploring Residents' Perceptions towards Neighborhood Planning of Urban-rural Mixture Land Uses – A Case Study of Nishitokyo City

都市部の緑農住まちづくりに対する居住者の認識を探る ―西東京市の事例研究

Yutong WANG (M2)
Advisor: Toru TERADA
Co-advisor: Prof. Makoto YOKOHARI

東京大学 THE UNIVERSITY OF TOKYO | GRADUATE SCHOOL OF FRONTIER SCIENCES THE UNIVERSITY OF TOKYO | GPSS-GLI | 都市・ランドスケープ計画研究室 Urban and Landscape Planning Lab

BACKGROUND

Urban Planning Challenges

- Decades of urban sprawl followed by economic and demographic shrinkage.
- Legacies of urban development despite a decreasing and aging population.
- Vulnerabilities in land use (vacancy and abandonment) and social capacities (elderly mobility, well-being, and food security).

Urban-rural Mixture Land Uses

- Integration of social and ecological systems
- Addressing land use and social capabilities by utilizing spaces for green space provision and agricultural production.

Research Gap

- Existing literature lacks comparative analysis of green space provision and agricultural space conservation in the same neighborhood scale.
- Planning of urban-rural mixture land uses lacks perspectives from local residents.
- Approaches to improve positive perceptions and mitigate negative perceptions are unclear.

RESEARCH AIM

To propose a planning guideline for neighborhoods with urban-rural mixture land uses.

Research Objective

1. To identify features of urban-rural mixture land uses, and their services and disservices in residential neighborhoods;
2. To examine residents' perceptions towards urban-rural mixture land uses in their neighborhoods;
3. To analyze influential factors of residents' perceptions from environmental, spatial, and socio-demographic perspectives.
4. To propose strategies and/or approaches to enhance positive perceptions and mitigate negative perceptions towards urban-rural mixture land uses.

METHODOLOGY

Case Study Area – Nishitokyo City

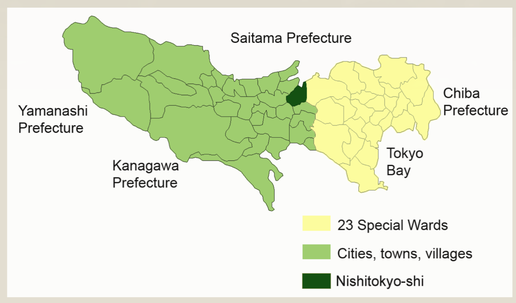
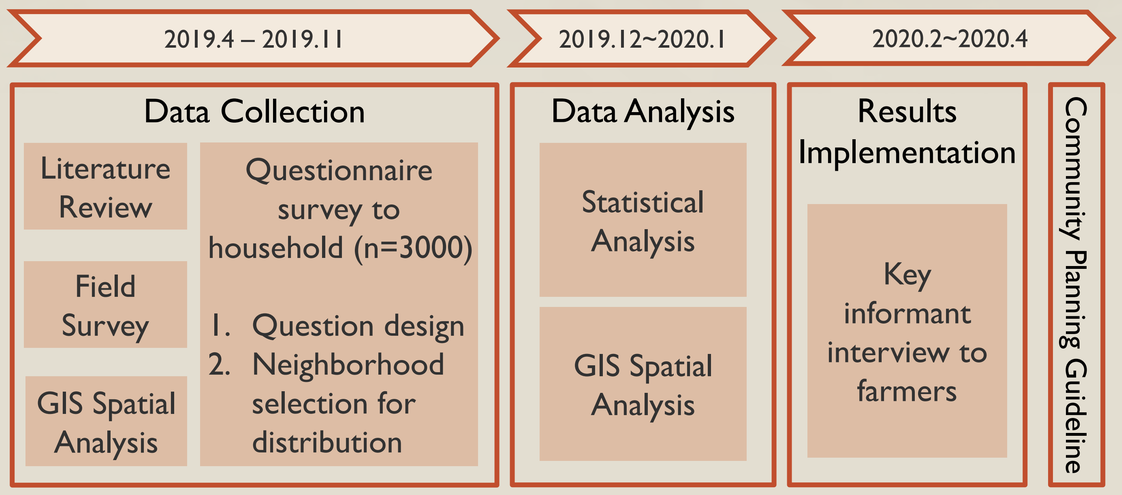


Figure1. Location of Nishitokyo City

Figure 2. Mixture land use of urban and rural

- 63% of residential land uses, and 13& of agricultural land uses
- Urban sprawl in recent decades has induced more residential development.
- Population: 204,658; Household: 98,939 (as of Oct.2019)

Framework



PROGRESS & FINDINGS

Completing Questionnaire Design and Neighborhood Selection for Distribution

Hypothesis: Spatial distribution, including the amount and mixture presence, is varied by neighborhood, and could influence residents' perceptions.

01. Field Survey Results

Figure 3. Identification of mixture types in Nishitokyo City

02. Survey Design

「みどりと農のまちづくり」に関するアンケート

Questionnaire on "Neighborhood Planning with Agricultural and Green Spaces"

Part 1 (Q1-Q7)
住まい地区のみどり
Perceptions of All Mixture Types in Neighborhood (5-Likert Scale)

Hypothesis:
Distance to, conditions of, services and disservices of farmlands and green spaces influence residents' perceptions.

Part 2 (Q8-Q11)
農とのふれあいについて
Relations to Agriculture and Local Farmers

Hypothesis:
Food consumption behaviors, social relations with farmers and agriculture-related activities influence preference to farmlands rather than other green spaces, and could positively mitigate disserves of farmlands and green spaces.

Part 3 (Q12-Q21)
回答者自身について
Demographic Information

Hypothesis
Demographics, including gender, age, family makeup, occupation, duration of residence, community involvement, agriculture-related experience and knowledge also influence residents' perceptions.

03. Neighborhood Selection

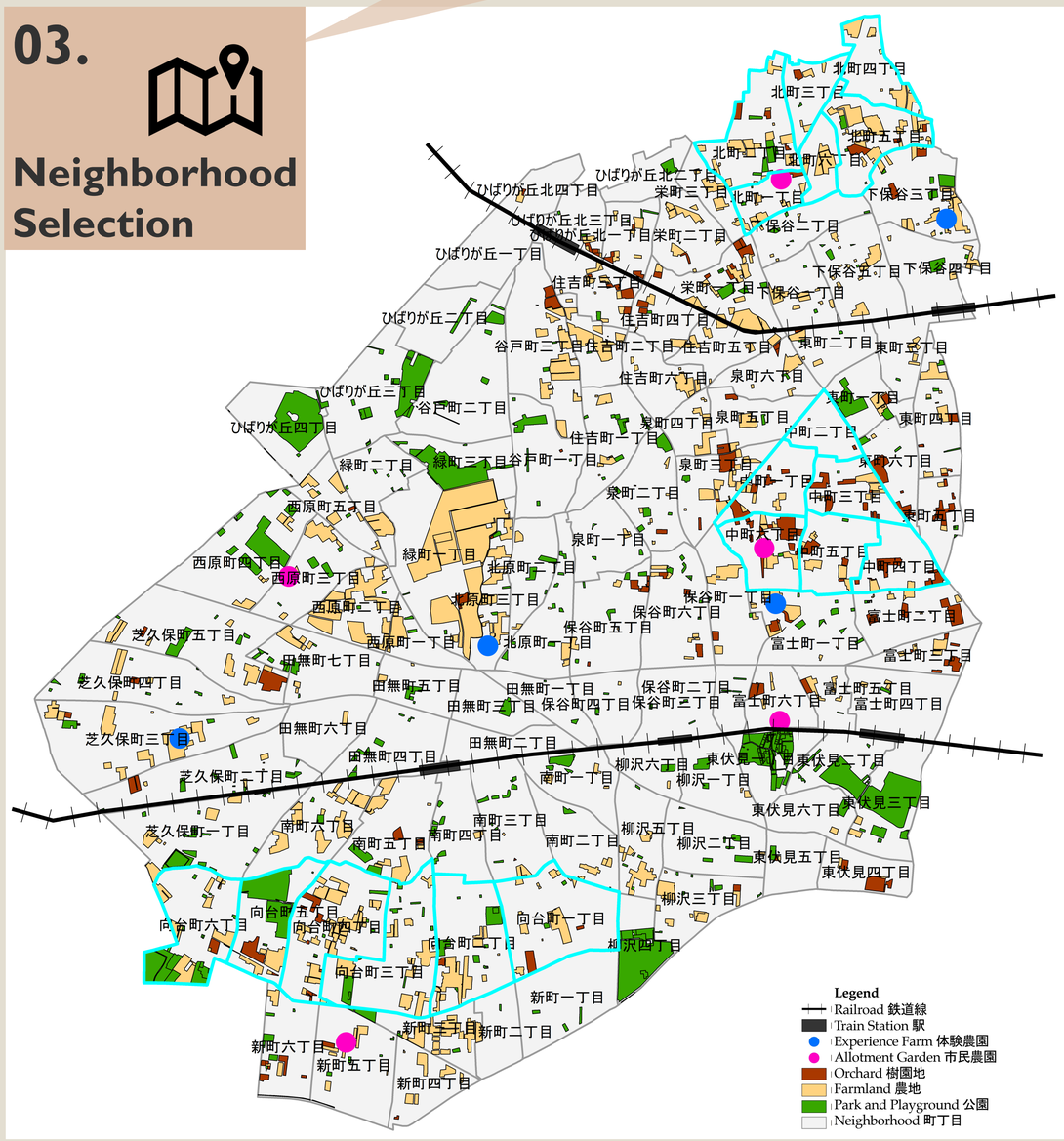


Figure 4. Spatial analysis of urban-rural mixture types in Nishitokyo City.

	Mukodaicho 向台町	Kitamachi 北町	Nakamachi 中町
Farmland農地	12.59%	15.7%	5.5%
Orchard樹園地	2.39%	2.82%	7.73%
Park/ Playground 公園	9.65%	1.44%	0.25%

Figure 5. Neighborhoods percentages in Farmland, Orchard, and Park.

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