



Methodology of field work for agricultural and rural geography

Akira Tabayashi
University of Tsukuba

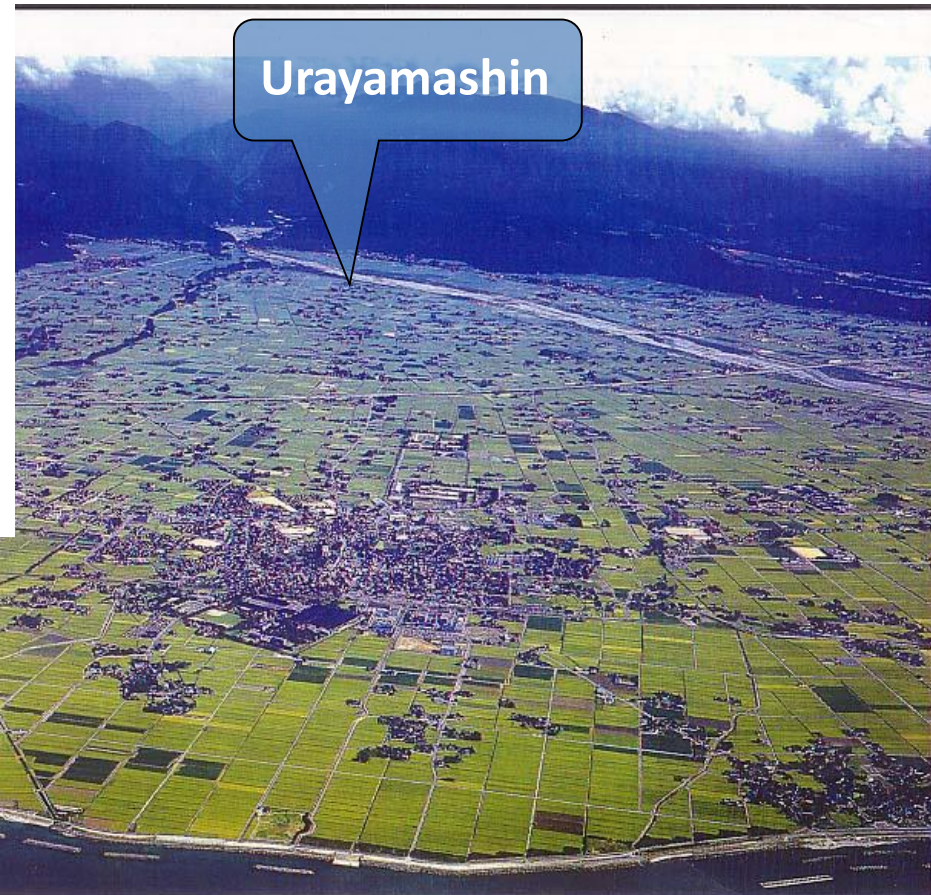
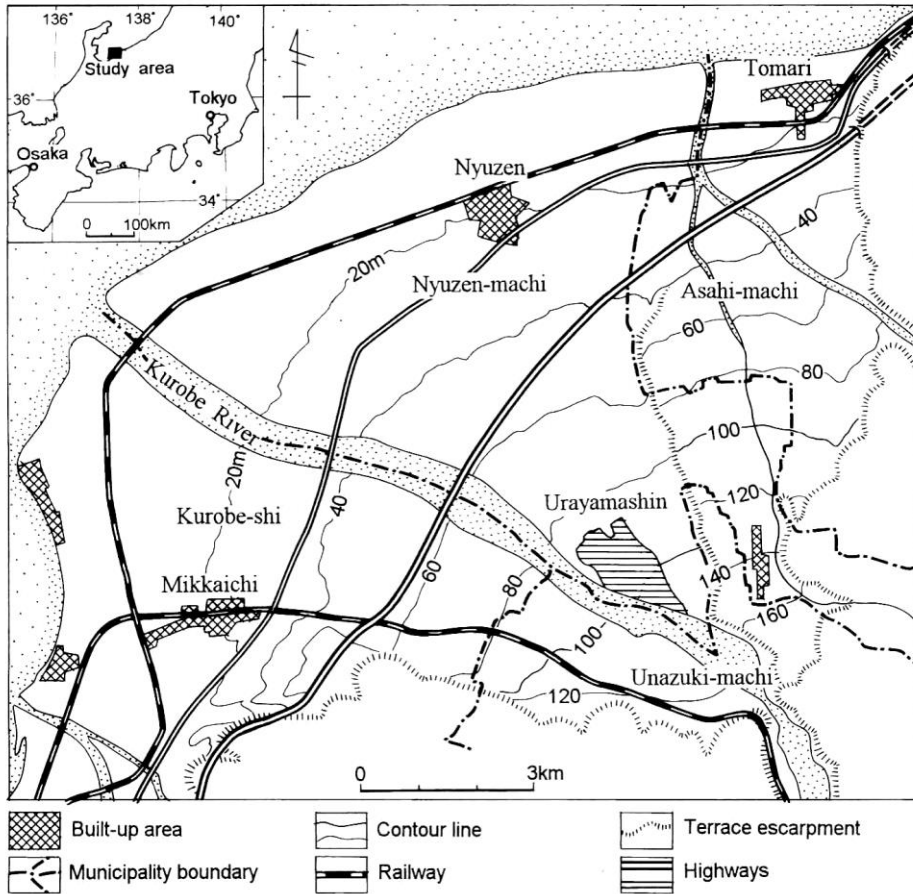
1. Purpose and process of the presentation

The purpose of this presentation is to clarify the process and method of field work in agricultural and rural geography. To be more specific, I will present how I participated in the research of the villages of the Kurobe alluvial fan in the 1970s and explain how this was linked to the development of later research. Finally, I will outline the procedure that I use for regional investigations. The order of the presentation is as follows.

- 1. Purpose and process of Presentation*
- 2. Research on rural villages on the Kurobe alluvial fan*
 - 2-1. Process of research on rural villages*
 - 2-2. Transformation of rural villages*
- 3. Continuation of research and new developments*
- 4. Conclusion*

2. Research on rural villages on the Kurobe alluvial fan

Kurobe alluvial fan



2. Research on rural villages on the Kurobe alluvial fan

2-1. Process of research on rural villages

- I decided to target irrigation systems of the Kurobe alluvial fan as the research for my master's thesis, but I could not do well.
- Farmers were more willing to talk about farmland improvement projects which were proactively being promoted in the 1970s.
- I became aware that the transformation of rural villages in an economic growth period was significant as a research topic of agricultural and rural geography at that time.
- Therefore, after submitting my master's thesis, I started to investigate the transformation of rural villages that had occurred due to the implementation of farmland improvement projects.

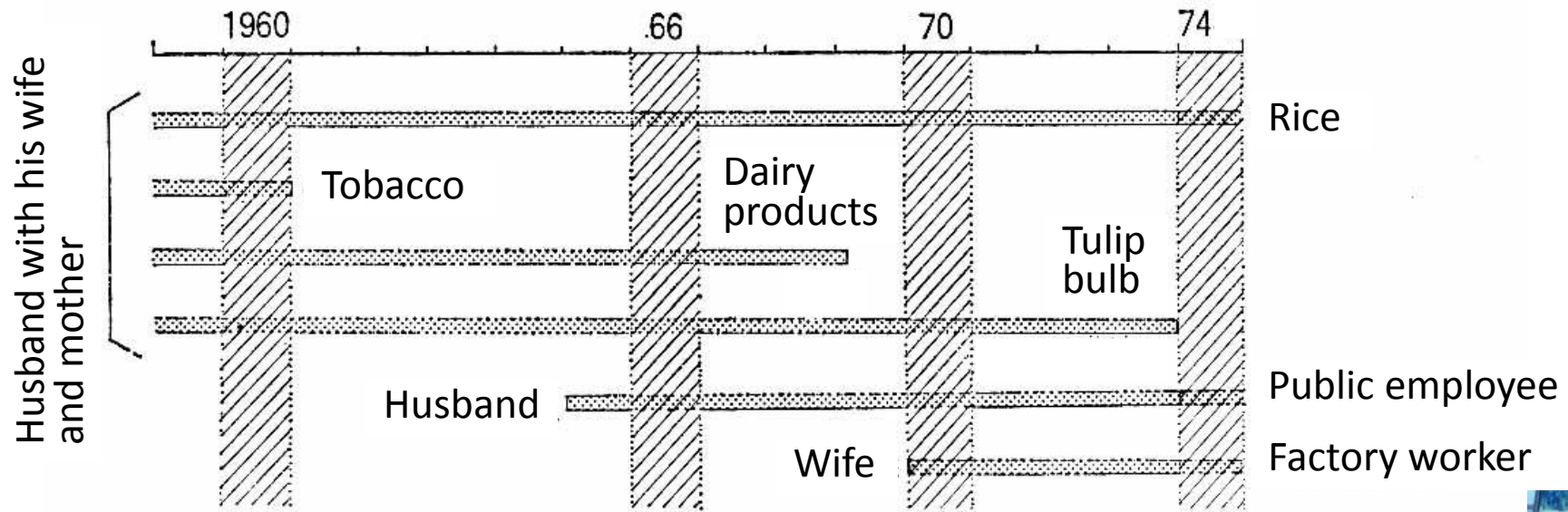
2. Research on Rural Villages on the Kurobe alluvial fan

2-1. Process of research on rural villages

- I selected Urayamashin of Nyuzen town as my study area.
- I randomly conducted interviews in many farm households in Urayamashin, but I had no idea of how I could sort out the changes within farm households and in the rural villages.
- I finally realized that the case of one farm household could be a basic model to explain the configuratuion of rural villages in this region.
- Mr. A who was a leader of Urayamashin for a long time gave a detailed explanation of the changes in his farm operation over the time period of a little more than 20 years, which helped me understand a specific image of the transformation of rural villages.

2. Research on rural villages on the Kurobe Alluvial Fan

Change of employment structure of Farm household A



Mr. A give me a specific image of the configuration of rural villages

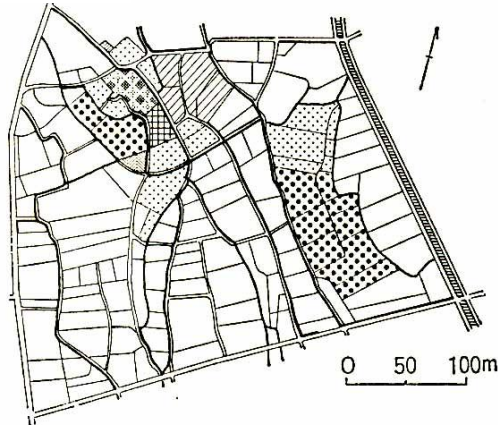


2. Research on rural villages on the Kurobe alluvial fan

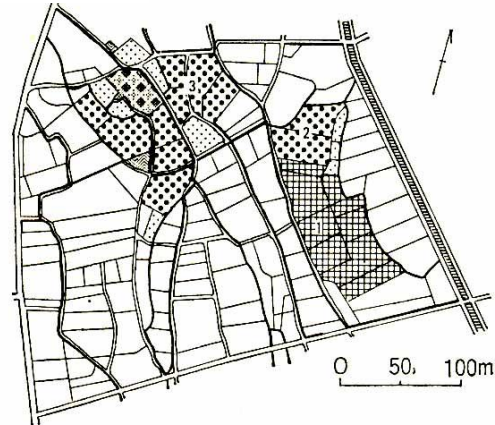
2-1. Process of research on rural villages

Change of cultivated land use and layout of farmhouse

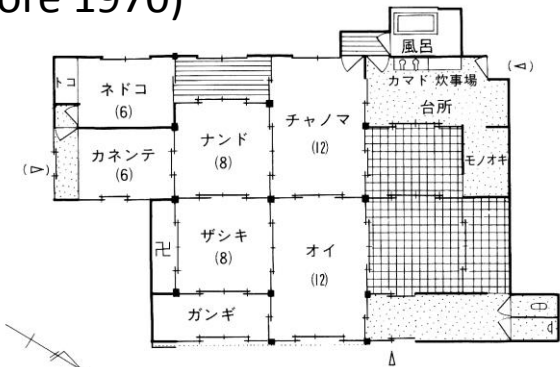
1960



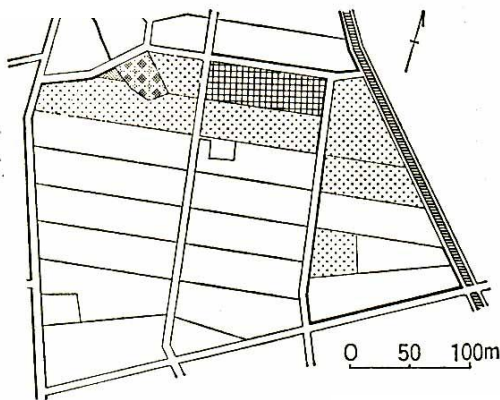
1966



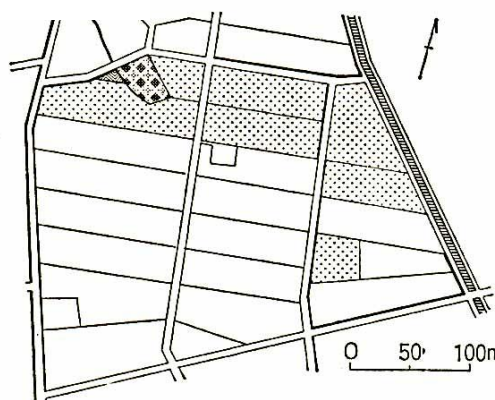
Before rebuilding
(Before 1970)



1970

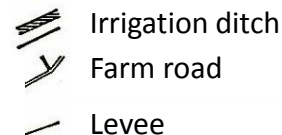
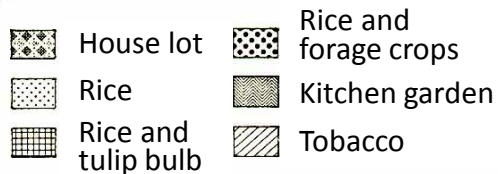
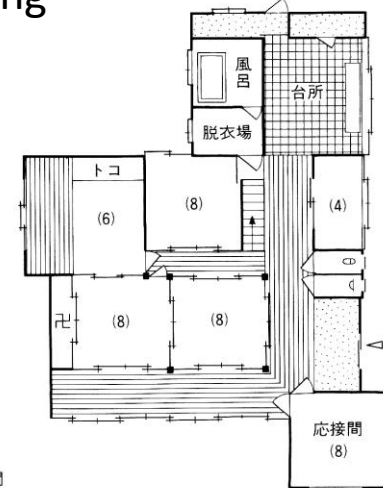
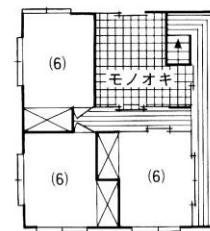


1974



After rebuilding
(After 1970)

(2 階)



0 2 間

2. Research on rural villages on the Kurobe alluvial fan

2-1. Process of research on rural villages

Data collection of community and region to demonstrate image(1)

- In empirical research on a small region, it is significant to understand the regional image.
- In order to develop a main thesis on the regional image through these interviews, I decided to collect specific data to demonstrate the situation in Urayamashin and in the entire Kurobe alluvial fan.
- Past landscapes were recreated based on aerial photographs and maps acquired from the land improvement district and a field study of the current situation was made.

2. Research on rural villages on the Kurobe alluvial fan

2-1. Process of research on rural villages

Data collection of community and region to demonstrate image(2)

- An investigation of the employment conditions of all 106 households in Urayamashin was conducted.
- A list of non-agricultural workplaces was acquired, and interviews were made at major worksites.
- An analysis of non-agricultural works, as well as farming activities was conducted to represent rural characteristics.
- As for the case of rural villages on the Kurobe alluvial fan, existing characteristics were compared to other regions and were examined based on the existing statistics and literature.

A) 1963



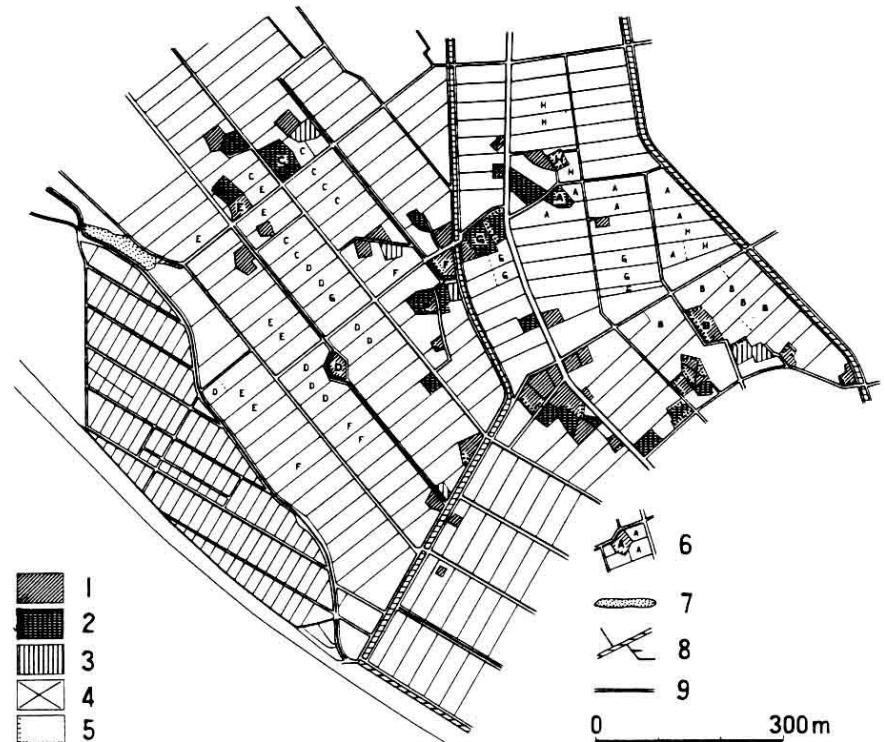
1. House lot, 2. House completely rebuilt, 3. House partly rebuilt, 4. Vacant house, 5. House lot surrounded by forest, 6. A farm household and its cultivated land 7. Old bank, 8. Irrigation canal and ditch, 9. Farm road

2 Research on rural villages on the Kurobe alluvial fan

2-2. Transformation of rural villages

Change of Cultivated Land in Urayamashin

B) 1974



August 1969



March 1970



April 1975



Change of landscape in Urayamashin

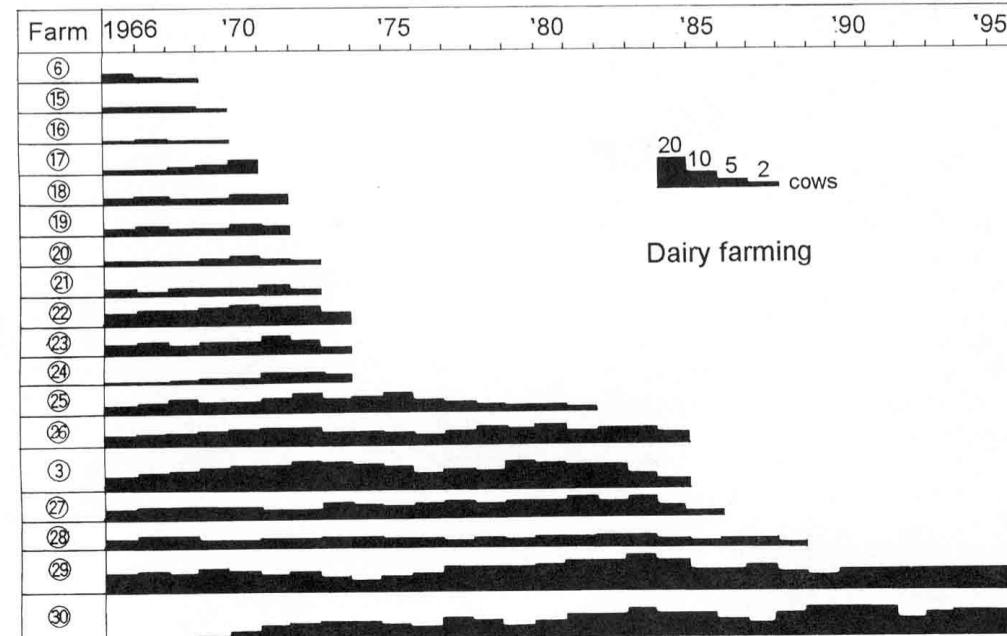
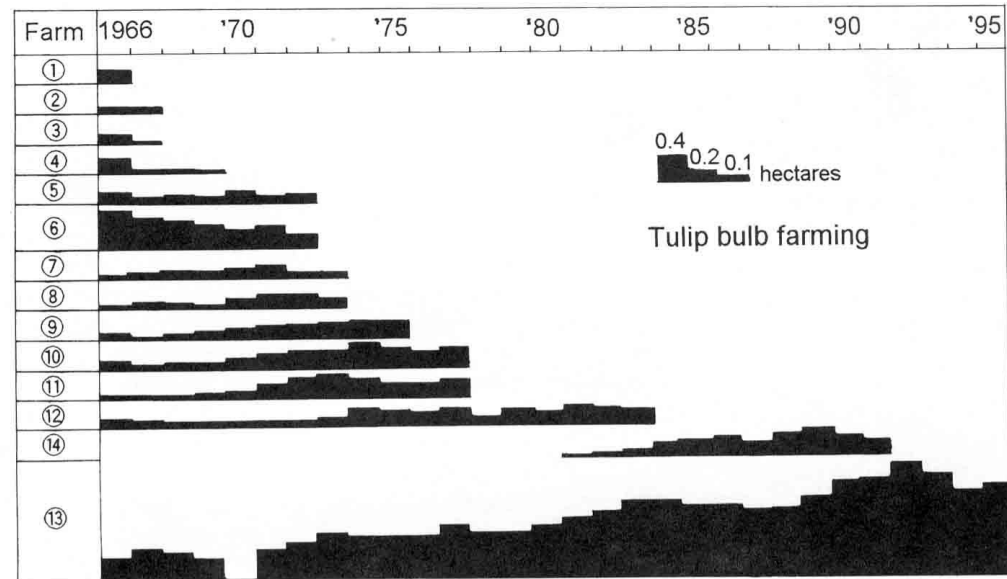
2. Research on rural villages on the Kurobe alluvial fan

2-2. Transformation of rural villages

Decrease in time for rice cropping, and decline of the tulip bulb cultivation and dairy farming

(hours per 0.1ha)

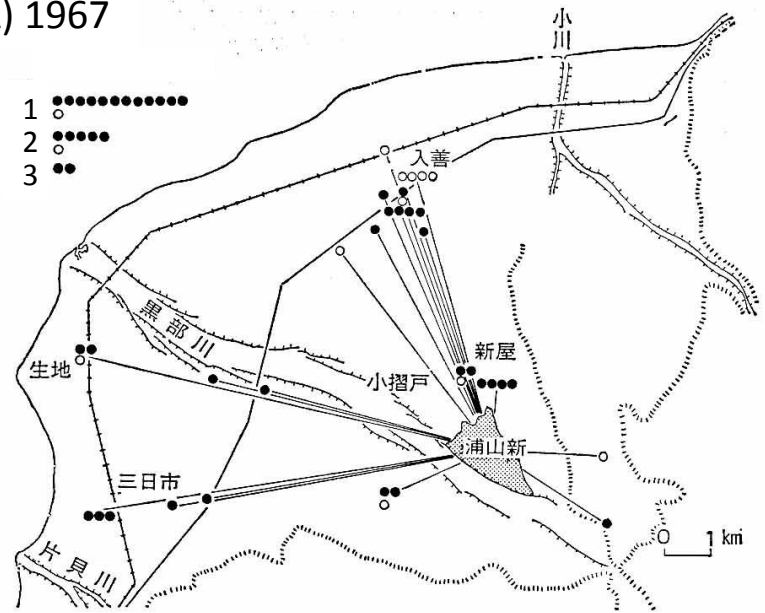
Works	1965	1971 (Average)	1971 (Minimum)
Seed pretreatment	0.5	0	0
Raising of seedling	6.0	6.0	4.0
Plowing and cultivating	11.5	5.1	2.1
Application of basal fertilizer	3.7	1.7	1.2
Transplanting	22.7	8.5	7.0
Application of additional fertilizer	2.0	3.3	3.0
Weeding	58.0	22.3	6.3
Water control	60.0	27.5	15.0
Control of insect pests	4.5	4.5	2.0
Harvesting	24.0	7.0	2.0
Drying and shelling	5.7	5.7	0.4
Total	198.6	91.6	40.0



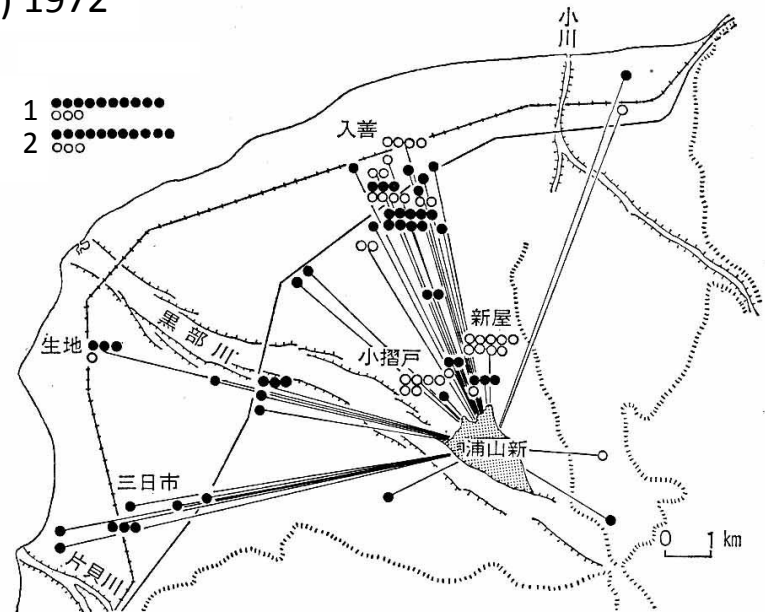
2. Research on rural villages on the Kurbe alluvial fan
 3-2. Transformation of rural villages

Increase of engagement in non-agricultural work

A) 1967



B) 1972



1. Public employee
 2. Factory and office employee
 3. Unknown

• One male --- Bank ---+--- Railway
 ○ One female --- Terrace escarpment --- Road

2. Research on rural villages on the Kurobe alluvial fan

2-2. Transformation on of rural villages

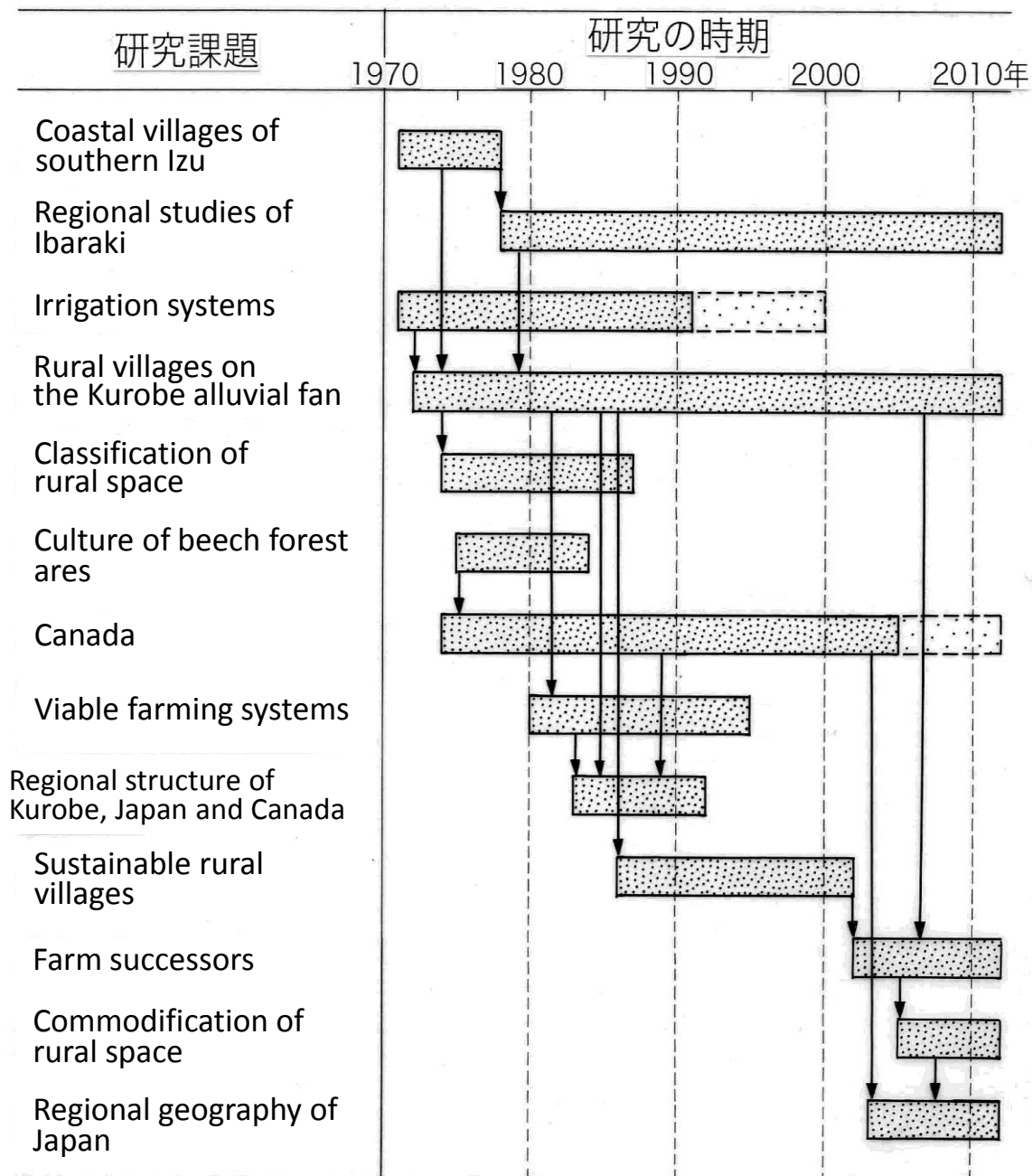
Change of employment structure of farm households in Urayamashin

Economic activities		1967	1972
Farming dominant	Farming	16	1
	Farming + Seasonal manual laborers (Manual laborers)	37	23
	Subtotal	54	24
Non-farm work dominant	Farming + Seasonal manual laborers + Factory and office employees (Manual laborers) (Public sector employees)	25	33
	Farming + Seasonal manual laborers + Factory and office employees (Manual laborers)	0	4
	+ Public employees		
	Farming + Factory and office employees (Public sector employees or self-employed)	21	36
	Subtotal	46	73
Non-farmers		7	8
Total		106	105

Source : Interviews with farmers

3.Continuation of research and new developments

In my case, the finding of my research on the “Transformation of a rural village on the Kurobe alluvial fan” in the 1970s, led to a great number of new research topics. The figure is a summary since I started to conduct field research as a graduate student.



3.Continuation of research and new developments

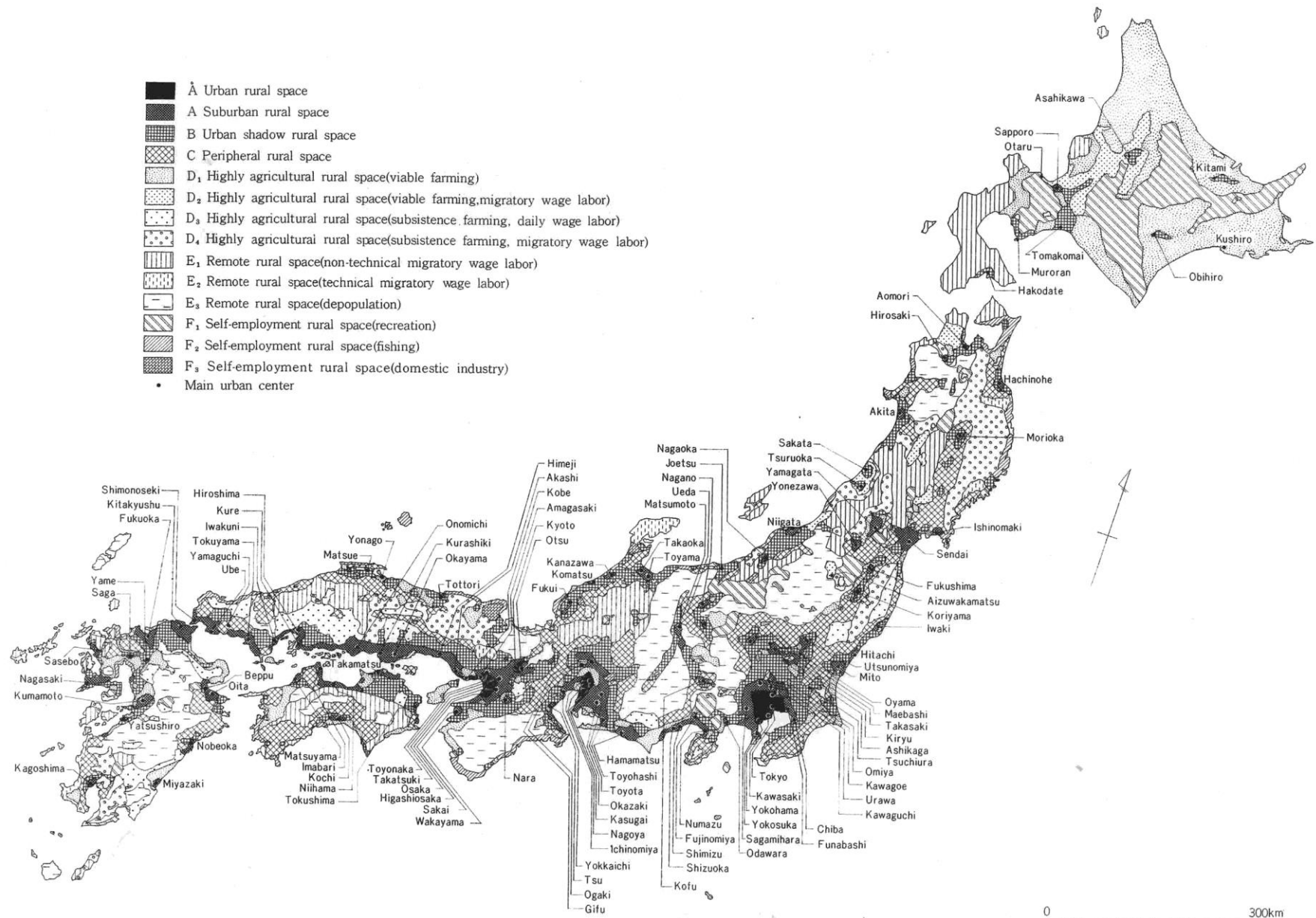
3-1.Further transformation of rural villages on Kurobe alluvial fan

Change of employment structure in Urayamashin

		number (%)					
		1967年	1972年	1983年	1994年	2002年	2012年
Farming dominant	Farming	16 (15. 1)	1 (1. 0)	5 (4. 6)	6 (5. 7)	5 (4. 7)	11 (10. 9)
	Farming + Seasonal manual labor (Manual labor)	37 (34. 9)	23 (21. 9)	9 (8. 3)	6 (5. 7)	4 (3. 7)	3 (3. 0)
		53 (50. 0)	24 (22. 9)	14 (13. 0)	12 (11. 3)	9 (8. 4)	14 (13. 9)
Non-farm work dominant	Farming + Seasonal manual labor (Manual labor) + Factory and office employment (Public sector employment)	25 (23. 6)	33 (31. 4)	24 (22. 2)	26 (24. 5)	16 (15. 0)	41 (40. 6)
	Farming + Seasonal manual labor (Manual labor) + Factory and office employment + Public sector employment	0 (0)	4 (3. 8)	7 (6. 5)	6 (5. 7)	5 (4. 7)	2 (2. 0)
	Farming + Factory and office employment (Public sector employment or self-employment)	21 (19. 8)	36 (34. 3)	49 (45. 4)	40 (37. 7)	48 (44. 9)	1 (1. 0)
		46 (43. 4)	76 (69. 5)	80 (74. 0)	72 (67. 9)	69 (64. 4)	44 (43. 6)
Non-farmers	Factory and office employment, Public sector employment or self-employment	7 (6. 6)	8 (7. 6)	14 (13. 0)	22 (20. 8)	29 (27. 1)	43 (42. 6)
Total		106 (100)	105 (100)	108 (100)	106 (100)	107 (100)	101 (100)

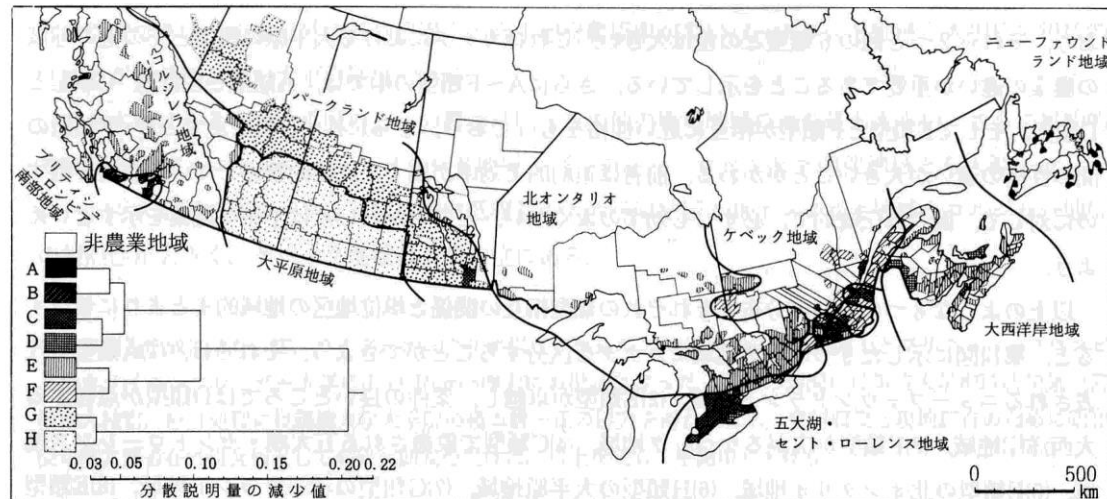
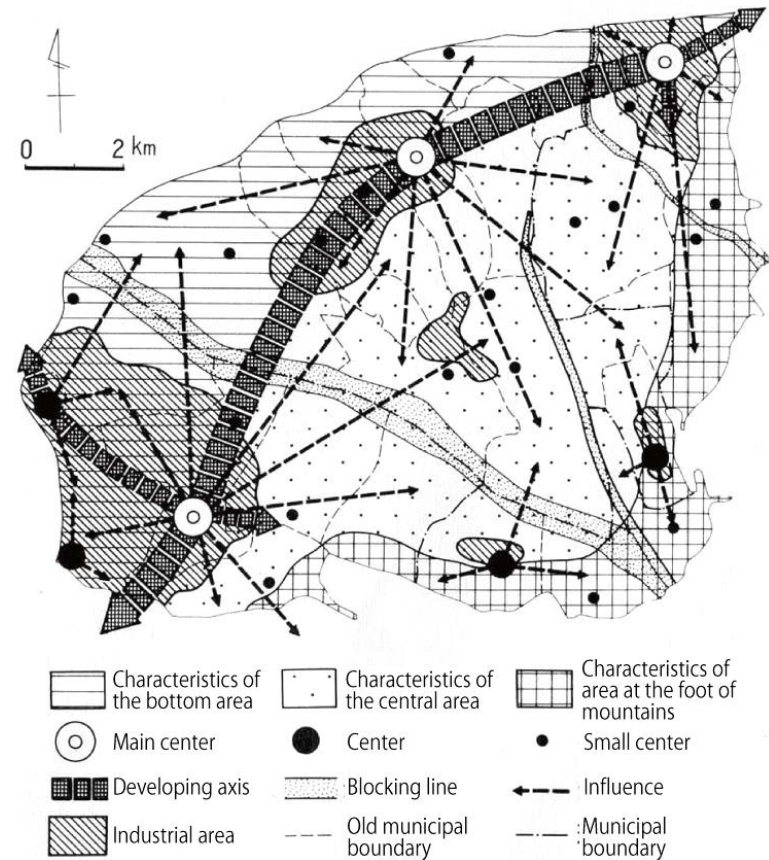
3.Continuation of research and new developments

3-2. Classification of rural space in Japan



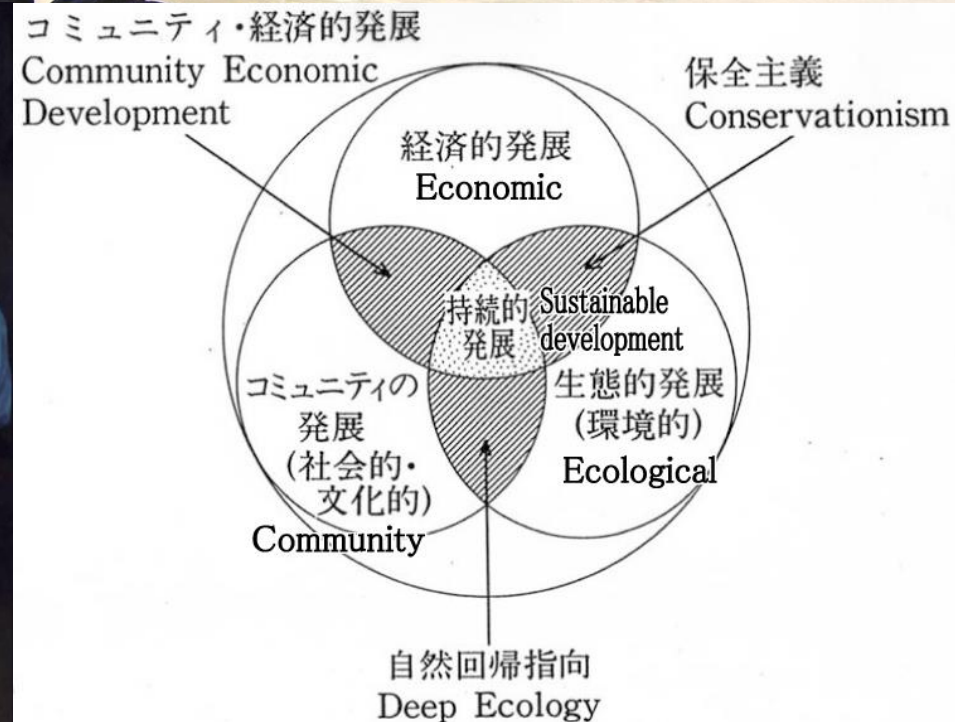
3.Continuation of research and new developments

3-3.Regional structure of the Kurobe alluvial fan, Japan and Canada



3.Continuation of
research and new
developments

3-4. Sustainable Rural Villages



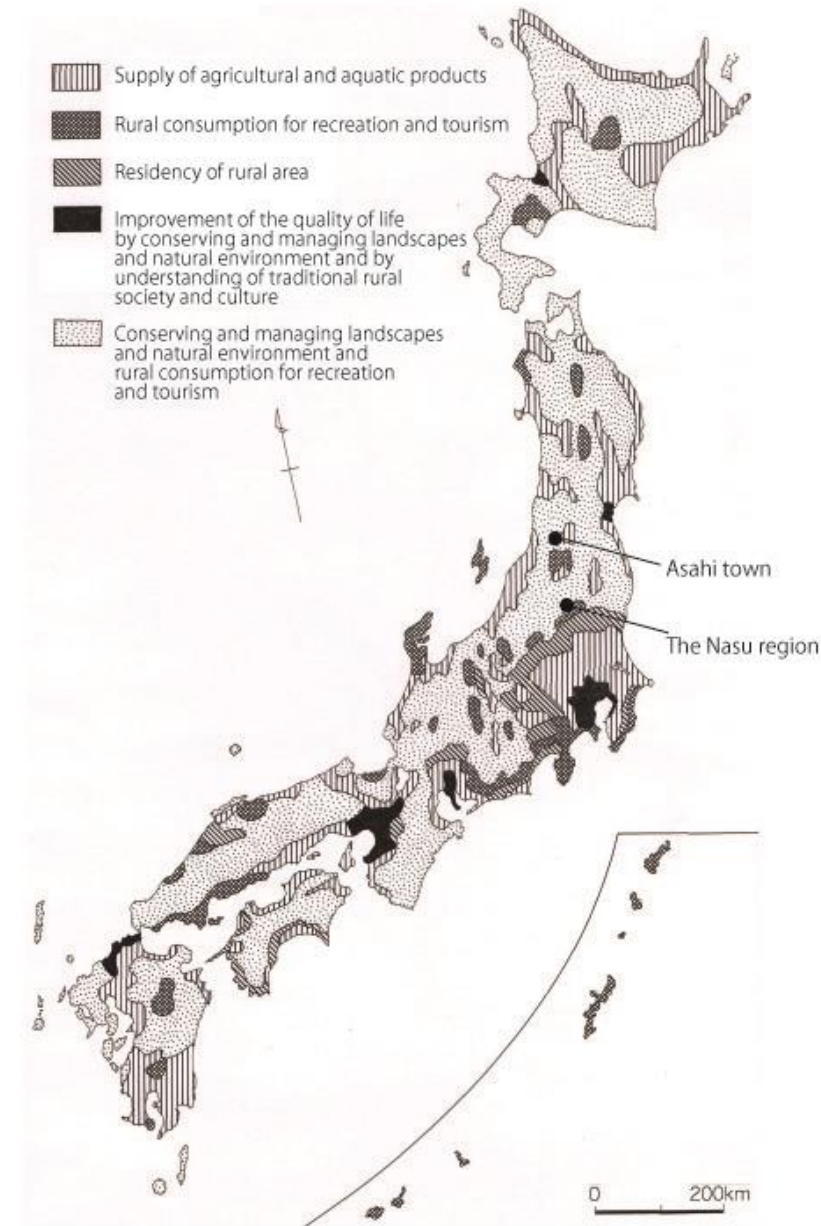
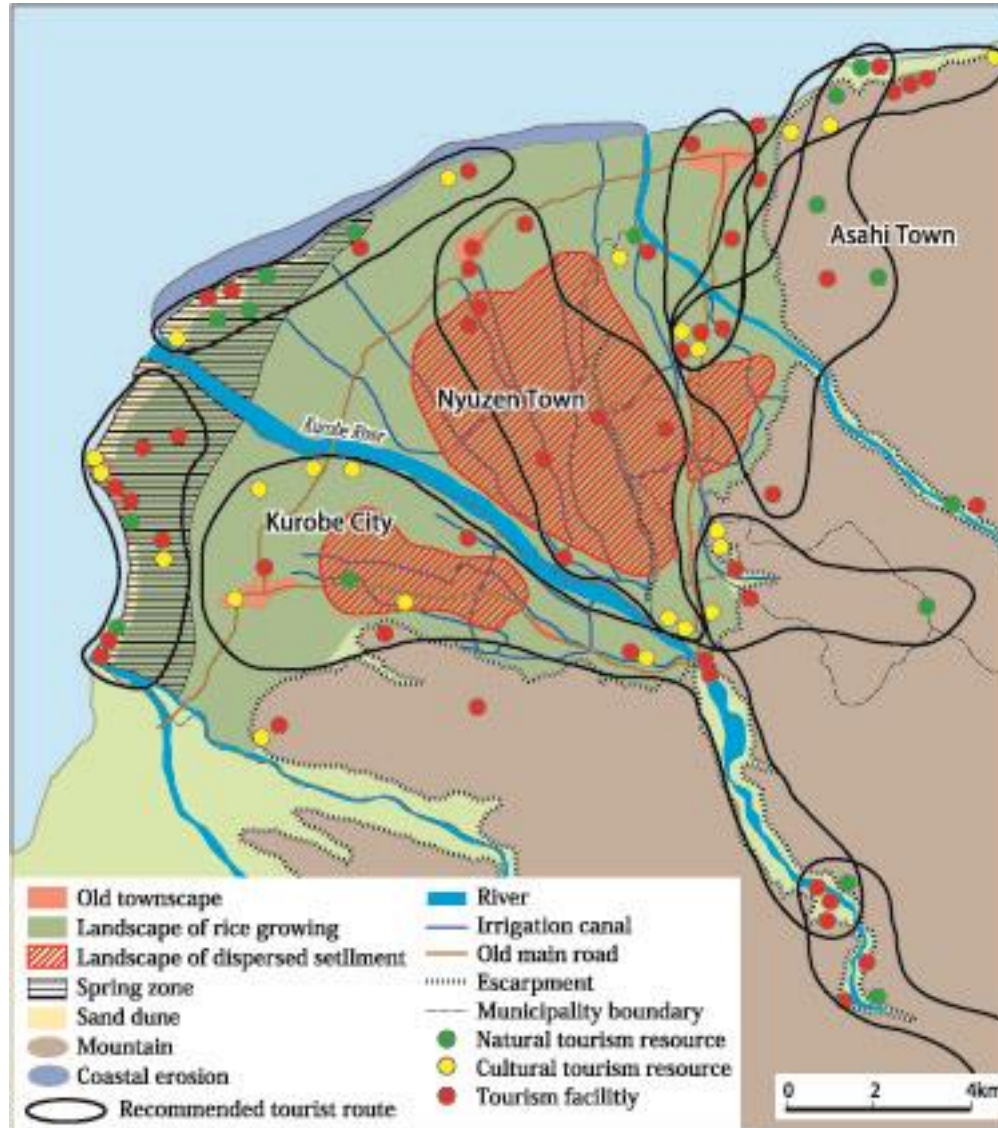
3.Continuation of
research and new
developments

3-5.Farm Successors



3.Continuation of research and new developments

3-6. Commodification of Rural Space



4. Conclusion

- The most significant component in a regional study is to understand the image of the basic direction of the regional phenomena and in order to do this, it is essential to implement a carefully conducted interview with a key person, which can take considerable time.
- To find a key person and to collect informative data is the key to success in a regional study.
- Furthermore, to continue to research one region in detail is an effective way to multilaterally develop research in agricultural and rural geography.
- Finally, I will outline the procedure that I use for regional investigations and then end my presentation.

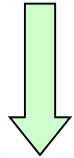
The Procedure of regional investigation

1. Preparation for research



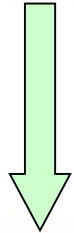
Setup of issues and hypotheses, Selection of region for research, Collection and examination of research data

2. Implementation of the field study



Understanding of the overall data, Grasp of regional image (finding a key person and interviewing him or her), Classification of items for interviews, Create atmosphere where people can talk comfortably, Collection of regional data to demonstrate the regional image

3. Recurring and supplemental research



There are often cases when one must change the original research issues and hypotheses due to one's field research. It is necessary to deepen the research by wandering back and forth between field and laboratory; I have generally followed a pattern where I research between 3 days to 1 week over and over again.

4. Analysis of research result and the creation of a thesis

Review and documentation of field notes, Data analysis (create main figures and charts), Construction of the entire main thesis, Presentation in an academic conference or other places, Creation of thesis