# Chair Land and Water Resources Management

# 2.5.11 Laboratory: Rural Planning

Member: Professor Hoshino, Satoshi, D. Agric. Sci.

Senior Lecturer Hashimoto, Shizuka, D. Agric. Sci.

Assistant Professor Kuki, Yasuaki, D. Agric. Sci.

Doctor's program 6
Master's Program 7
Undergraduate 8
Other 2

#### **A. Research Activities (2010.4-2011.3)**

#### A-1. Main Subjects

a) Restructuring of the systems of local resource management by introducing knowledge management

Local resources such as farmland, a mountain, reservoirs, etc. are maintained by the knowledge and skills that has been accumulated in the farmers over many generations. However, the tacit knowledge related to the resource management is not properly succeeded by the next generation but dispersed. There is concern that the resource management will be difficult in many places. The strategy for succeeding to the necessary knowledge for the local resource management is researched introducing the knowledge management as counter measures in this study.

b) Analysisis of social capital (SC) for the strategy of revitalisation of rural areas

Cooperation of the local residents is the key issue to accomplish the revitalisation of rural areas. We supporse that social capital is one of the most important factors to build up the system of cooperation. This study aims to analyse the correlation between the revitalisation of rural areas and social capital from the point of view of the policy of the decoupling for the mountainous area. Considering the strategy that strengthens the SC is also the part of this study aim as well.

c) Consideration of measures to prevent agricultural damage by wildlife in mountainous areas

The agricultural damage caused by wildlife, especially wild boar, and the measures to prevent the damage by farmers are investigated in Wakayama Prefecture. This study focus on the relation between the farmers' attitude and the farmers' profile, as well as the non-farmers' attitude toward the agricultural damage caused by wild lives. The goal of this study is consideration of the problems in order to set the measures to prevent the agricultural damage caused by wild lives under the residents' participation using workshop methods, and the measure suitable for the study area will be conducted and the effectiveness of the measures will be evaluated.

d) Comparative study on the integrated community development planning among four eastern Asian countries

The purpose of this study is to elucidate the universal framework of Integrated Community Development Planning via international comparative research among East Asian countries of Japan, Korea, Taiwan and China. Characteristics of rural communities and institutional settings widely differ among countries. By the comparison of the cases, we try to abstract the interactions between planning system and its environmental conditions and based on the knowledge and the empirical rules, we establish the universal planning framework for community planning applicable to these counties.

# A-2.Publications and presentations

a) Publications

### **Books**

- Hosino, Satoshi, pp.126-127, Koike, Tsuneo et al. (eds.) "Keywords to understand Argiculture, Food and the Environment", Showado (Kyoto), 2011.
- Satoshi Hoshino: 1.1 Significance and Purpose (1. Basic conception of rural improvement), Handbook of Irrigation, Drainage and Rural Engineering, The Japanese Society of Irrigation, Drainage and Rural Engineering (Tokyo), 51-54, 2010
- Shizuka Hashimoto: 1.6 Consensus Building (1. Basic conception of rural improvement), Handbook of Irrigation, Drainage and Rural Engineering, The Japanese Society of Irrigation, Drainage and Rural Engineering (Tokyo), 66-69, 2010
- Yasuaki Kuki: 1.3.4 Physical Plan, 1.3.5 Land Use Plan (1. Basic conception of rural improvement), Handbook of Irrigation, Drainage and Rural Engineering, The Japanese Society of Irrigation, Drainage and Rural Engineering (Tokyo), 56-58, 2010

#### Original Papers(including book-reviews)

- Morimoto Hidetsugu, Hoshino Satoshi and Kuki Yasuaki: Multi-Crtiteria Analysis for Biomass Utilization Applying Data Envelopement Analysis, Transactions of the Japanese Society of Irrigation, Drainage and Rural Engineering, 272, 43-51, 2011

- Ryohei Yamashita, Tomoki Yoshida, Satoshi Hoshino, Yasuaki Kuki and Hidetsugu Morimoto: Descliption and Extraction of the Problems in Promotion Scenario of the Methane Fermentation Digested Liquid as Liquid Fertilizer based on the Meta Game Theoretical Thinking, Journal of Rural Planning, 29(4), 463-472, 2011
- Ryohei Yamashita, Yasuaki Kuki, Satoshi Hoshino: Essential Factors in Promoting Endogenous Development During the Depopulation Era in Less-Favored Areas: Case Study of Sugiyama in Maizuru City, Kyoto, Japan, Proceedings of International Conference 2010, Asian Rural Sociology IV, Volume II, 277-283, 2011
- Yasuaki Kuki, Yasunari Miyake, Yosuke Kudo: Characteristics of the Rural Landscape Conservation Activities Based on the Ordinance, Journal of the Japanese Society of Irrigation, Drainage and Rural Engineering, 78(8), 693-698, 2010
- Takeyama Emi and Yasuaki Kuki: Designing Guideline of Separation Zone between Habitat of Wildlife and Agricultural Field Examination for improvement of Countermeasures to Decrease Agricultural Damage by Wildlife in Uruno, Kozagawa town, Wakayama Prefecture, Journal of Rural Planning, 29(5), 233-238, 2010
- Hidetsugu Morimoto, Shizuka Hashimoto, Satoshi Hoshino and Yasuaki Kuki: Evaluation for Utilization of Woody Biomass in Large scale, Centering on a Biomass Town -Case Study of Shiso City and Neighboring Districts, Hyogo Prefectures-, Journal of Rural Planning, 29(5), 191-196, 2010
- Kazuya Kubota, Shizuka Hashimoto, Satoshi Hoshino and Yasuaki Kuki: Characteristics of Knowledge Transfer Behaviors through Inspection Tours Case Study of Sasayama Basic Ordinance for Local Government -, Journal of Rural Planning, 29(5), 257-262, 2010
- Tomoko Kawaguchi, Masaya Nakatsuka and Satoshi Hoshino: A Study on the Use and Problems of the Community Support Stuff System A Case Study of Sasayama City and Tamba City, Hyogo Pref.-, Journal of Rural Planning, 29(5), 263-268, 2010
- Yasuaki Kuki, Satoshi Hoshino, Shizuka Hashimoto and Yasunari Miyake: Influence of Support Bodies in the Planning Methods and forms of Rural Community Plans A Case Study of "Satodzukuri" Plang of Kobe City, Journal of Rural Planning, 29(5), 317-322, 2010
- Mayumi Nakanishi, Satoshi Hoshino, Shizuka Hashimoto and Yasuaki Kuki: Municipalities' Priority Problems and Prospects of Establishing Ordinance to Measures for Marginal Hamlets based on a Survey of National Liaison Council of 'Suigen no Sato'-, Transactions of the Japanese Society of Irrigation, Drainage and Rural Engineering, 269, 361-367, 2011

- Aya Fujimoto, Satoshi Hoshino, Yasuaki Kuki and Shizuka Hashimoto: The Potential of a Multilayered Intermediary System for the Acceptance of Immigrants -Case Study of Ayabe City, Kyoto Prefecture -, Journal of Rural Problems, 46(2), 213-219, 2010.
- Tomoya Kishioka, Sizuka Hashimoto, Satoshi Hoshino and Yasuaki Kuki: Spatial Distribution of People's Attitudes toward Wildlife Management -Case Study of Nagahama City, Shiga Prefecture-, Papers on Environmental Information Science, 24, 77-82, 2010

### Reviews

- Yasuaki Kuki: Looking at City Planning from the Viewpoint of Agricultural Policy, Shin-toshi, 65(2), 88-92, 2011
- Satoshi Hoshino: Toward Comparative Study of Rural Planning, Journal of Rural Planning, 376-385, 29(3), 2010

# Reports, others

- Hoshino Satoshi: Summary of the symposium, Mizunominamoto, Vol.12, 4, 2010
- Hoshino Satoshi: Conservation and Regeneration of Rural Resources --Soft approach for Residents and Local Groups, Rural Development, 721, 10-11, 2011
- b) Conference and seminar papers presented
  - 2010 Autumn conference of the Association of Rural Planning: 6 papers
  - 2010 Annual meeting of the Japanese Society of Irrigation, Drainage and Reclamation Engineering: 5 papers
  - The 24th annual meeting of the center for environmental information science: 1 papers
  - 2010 Spring conference of the Association of Rural Planning: 1 papers

# A-3.Off-campus activities 2

Research grants

1. Grants-in-aid for Scientific Research(KAKENHI)	
- Scientific Research (B): Hoshino, Satoshi, D. Agri. Sci.: Development of rural planning applying the knowledge management	g measures
- Challenging Exploratory Research : Hoshino, Satoshi, D. Agri. Sci. : Comparative study integrated community development planning among four eastern Asian countries	on the
2.Other Research Grants	
- 2010 Research Grant from Nihonoseimei Zaidan: Hashimoto, Shizuka, D. Agri. Sci.: Sci. Analysis of Regional Biomass Circulation based on Biomass-Towns	enario
A-4.International cooperation and overseas activities 1	
International meetings(country,roles)	
- Satoshi Hoshino: International meeting on rural community development ( Taiwan, invit	ed speaker)
A-4.International cooperation and overseas activities 2	
Visiting Research Scholars	
- Professor 1 (Austria)	
B.Educational Activities(2010.4-2011.3)	
B-1.On-campus teaching a) Courses given	

- Undergraduate level: Rural planning (Hoshino), Land consolidation engineering (Kuki), Surveying

(Hoshino), Rural planning and practice (Hoshino and Kuki), Practice in

surveying (Hashimoto and Kuki)

- Graduate level: Seminar in Agricultural and Environmental Engineerig (Hoshino), Rural land

use planning (Hashimoto), Rural environmental planning (Hoshino), Special seminar in rural planning I (Hoshino and Hashimoto), Special seminar in rural planning II (Hoshino and Hashimoto), Laboratory course in rural

planning (Hoshino and Hashimoto)

### B-2.Off-campus teaching etc.

#### Part-time lecturer

- Hoshino, Satoshi, D. Agri. Sci.: United Graduate School of Agricultural Sciences, Special seminar

- Hashimoto, Shizuka, D. Agri. Sci.: Tohoku University Ecosystem Adaptability GCOE, Programs of Professional Ecosystem Manager "Environmental Scenarios"

#### Open lectures, etc.

- Hoshino, Satoshi, D. Agri. Sci.: Symposium on the administrative system sending managing officer to local community, Chusankan-chiiki Forum, Coordinator

# **B-3.Overseas teaching 1**

#### International students

- International students: Doctral 2 (Taiwan) Research Students 2 (China)

# B-3.Overseas teaching 2

# Lectures and seminars

- Hoshino, Satoshi, D. Agri. Sci.

Rural Planning in Japan(Lecturer): National Chung Hsing University(Taiwan)