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1. Research Staffs

1.1 Nature-Based Tourism Unit

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Landscape Planning
[Arrived in Jan, 2013]

1.3 Tourism Policy and Tourism Information Unit

Yoshiaki HOMPO
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Urban analysis, GIS, city planning
[Arrived in Oct, 2012]

1.2 Culture-Based Tourism Unit

Hideki AZUMA
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2. Research Summaries

2.1 Nature-Based Tourism Unit

Development of the method of ecotourism for environmental education (Drs. KOSAKI & IKAZAKI)

Sustainable use of terrestrial ecosystems is always required for our life in harmony and it must be endorsed by confirmed knowledge about right manner of cycling of organic and inorganic components in an ecosystem. Extensive field study was conducted at Ogasawara in Japan, Inner-Mongolia in China, Sahel in Niger, and Peninsular Malaysia, in order to obtain basic data related to soils, vegetation cover, and environmental variables such as temperature, precipitation, soil moisture, and others for understanding and modeling the cycles of the above components in each ecosystem. Those data were further compiled and built up into the contents to be used for planning eco-tours for environmental education in the listed areas.

Activities of “Soil Degradation Research Initiative (SDRI)” (Drs. KOSAKI & IKAZAKI)

SDRI has been funded by the university since 2009 to promote organizing a research group on and disseminating research outcomes of soil degradation control, remediation and rehabilitation in collaboration with domestic and international research and educational institutions. SDRI convened two international symposia in 2012: “Soil Erosion and Degradation on Agriculture Land” together with European Confederation of Soil Science Societies, International Union of Soil Sciences (IUSS) on July 2-6 at Bari, Italy, and "General Soil and Water Management and Conservation" with Soil Science Society of America and IUSS on October 21-24 at Cincinnati, OH, USA. Oral and poster papers were presented in both symposia and 10 of them were selected and published in the special issue of Soil Science and Plant Nutrition.

Study on the Commodification of Rurality (Dr. KIKUCHI)

I focus on rurality as an option to urbanity in Tokyo metropolitan fringe, and discuss the sustainable commodification of rural space in the area. Following my discussion, I identify some of the conditions that supported the commodification of rurality and their interaction in the outer fringe of Tokyo metropolitan area. In this area, the areal decrease of rural forests (satoymaya) has led to the decline of rural landscape; the development of affordable housing lots in the outer fringe and the continuous inflow of urban residents into the newly developed areas have led to serious conflicts between rural and urban land uses. Recently however, activities that aim at recreating rurality, such as conservation of rural forests, have been promoted as a means to mitigate such conflicts, and to develop these areas as nodes of rurality and urbanity. Thus, the perpetuation of rurality has been assured by the sustainable relationships between rurality and urbanity. The conservation of rurality facilitates the commodification of rural spaces, a process which has played an important role in developing rurality-based tourism.

Study on the Food System and Food Tourism (Dr. KIKUCHI)

I made a point of the food system in terms of Japanese organic fresh vegetables based on the case study of Tokyo metropolitan area, and discussed on its potential development for food tourism. The food system is a commodity chain from the production to the consumption, and has emphasized the relationships between them since the 1990s, when the globalization of food supply systems has increased. In Japan, the food system of organic fresh vegetables plays an important role in satisfying consumers of Tokyo metropolitan area, which need fresh vegetables insured safety through an alternative commodity chain. When the food system of organic vegetables has the commodity chain including farm shops and restaurants, it is possible for organic vegetable farming to develop the food tourism.
of the natural environment. This research suggests that nature-oriented tourism can be one means to help achieve sustainability as well as protecting the important world heritage site. Well-planned tourism (the case of Australia and Canada) could provide economic and political incentives for proper management and for conservation and could bring additional benefit to local communities and regional economies.

**General flowering phenomenon in Southeast Asia (Drs. NUNATA, ARIMA, HOSAKA)**

General flowering (GF) is supra-annual community-level synchronization of reproduction of many plant taxa in Southeast Asian rainforests. In this region, diverse tree species including dipterocarp species represent reproductive synchronization with 5-7 months at irregular intervals of 1–10 years. GF results in a massive number of fruits in the forests, and therefore GF plays a central role in the successful regeneration of dipterocarp forests in Southeast Asia. We have monitored distribution patterns of GF forests and climatic conditions throughout the Peninsular Malaysia. GF episodes occurred every year, but the spatial occurrence varied considerably from just a few forests to the whole of Peninsular Malaysia. In three regional-scale GF episodes, most major events occurred in regions where prolonged drought (PD) had been recorded prior. However, no significant association between GF scores and PD or low temperature (LT) was found in any episode, and the frequency of PD was higher than that of GF throughout the peninsula. Our results clearly showed that the proposed proximate cues do not separately explain the spatial and temporal pattern of GF in the peninsula. This result implies considerable geographical variation in proximate cues for GF.

**Conservation and sustainable use of biodiversity in urban and peripheral ecosystems (Drs. NUMATA, HOSAKA, KIKUCHI, KOSAKI, ARIMA, IKAZAKI, SHIMIZU, KAWAHARA, KATAGIRI)**

The world’s urban population is predicted to reach nearly 5 billion by 2030 with much of this growth in developing countries and in cities with < 500 000 inhabitants. Green areas have been justified on the basis of ecological and social services such as improved climate, hygiene, aesthetics, recreational opportunities, environmental protection and biodiversity. In order to improve and optimize urban biodiversity, participation of local people is essential. However, the increasing human population and the associated increase in rates of resource use and habitat loss are forcing competition between people and people for space and food resources (human-wildlife conflict). Towards an achievement of conservation and sustainable use of biodiversity in urban and peripheral ecosystems, we conducted 1) evaluation of natural environment and biodiversity in urban and peripheral areas, 2) understanding of natural resource use by local community in urban and peripheral areas, and 3) identification of current and emerging human wildlife conflict in urban and peripheral areas.

**Factors affecting distribution pattern of an invasive plant species in a Malaysian National Park (Dr. NUMATA)**

The spread of invasive weeds causes serious problems in national park, and control of invasive plants becomes one of the most urgent issues in national park management. To understand mechanism of invasion, we focused on an invasive shrub of Latin American origin, *Cleome hirta* in a Malaysian national park, the Malay peninsula. *Cleome hirta* is a tropical shrub, and it is known that this species has invaded to tropical area of the world, such as Hawaii, Fiji and Malay peninsula. This study was conducted in Peta area of Endau Rompin national park where there are several activities for tourists such as trekking, camping, and rafting. The species was found on old logging roads and nature trails in the park. Most of *C. hirta* was distributed at a specific light condition: between 5% and 15% in canopy openness. We also found an exclusive relationship between *C. hirta* and another plant species (*Dicranopteris* sp.) at high light condition, suggesting absence of *C. hirta* in high light condition may be due to results of competitive with *Dicranopteris* sp. On the other hand, we found less negative distance dependency in plant density, suggesting visitor’s activity may not greatly relate to the distribution pattern of *C. hirta*.

**Establishment of Carrying Capacity Systems for Natural Resources and Areas (Dr. ARIMA)**

This research examines carrying capacity. This concept is common in managing natural resources in national parks and other natural areas, although the systems and programs using this concept in Japan are in their infancy. The research aims to create such systems and programs by using GIS with natural resource and resident data and other statistics. Some field surveys and research reviews on the Ogasawara Islands and Nijima Island were conducted in fiscal year 2012. In fiscal year 2013, this research is progressing to more detailed surveys in the fields.

**Research of Suitable Analytical Methods for Tourism Spaces (Dr. ARIMA)**

It is difficult to capture the characteristics of a tourism space and its development in an urban area, because an urban area involves many factors, not only the tourism one. Also, there are not sufficient data representing tourism in Japan. This research
deals with understanding urban tourism space and its changes in Tokyo by using some guidebooks and other materials. This research is going to be documented in a scientific paper.

Organizing Methodologies in Tourism Geography (Dr. ARIMA)

Young generations on tourism geography have been increasing recently, and consequently, the methodologies and analysis methods are getting more diversified. This research aims to classify existing ones for the future perspective of tourism geography. Classification of researchers, textbooks, and scientific studies were conducted in fiscal year 2012. Now the results and outcomes are being written in a scientific paper. More detailed classification of the methodologies and analysis methods of tourism geography is now continuing with the aim of creating a new textbook of tourism geography in Japan.

Regional Studies of Tourism and Related Phenomena (Dr. ARIMA)

Many societies and communities in Japan regard tourism as one of the tools of regional development, whatever the situation of a society or community. This is because each has its own regional factors and there are many types of tourism: urban tourism, ecotourism, tourism at hot springs, and so on. Regional studies in relation to tourism are being conducted of many types of sites and areas for the purpose of understanding many situations. In particular, Geoparks and World Heritage Sites are main topics.

Psophocarpus tetragonolobus as a cover crop, both of which are indigenous crops and have a high potential for new tourism resources such as local specialties and luxury cosmetics.

Effects of Sightseeing Activities on Soil and Vegetation in Hulunbuir Grassland, Inner Mongolia, China (Drs. IKAZAKI and KOSAKI)

Grassland degradation is a major problem in Inner Mongolia and its causes have been said to be overgrazing, overcultivation, and climate change. However, sightseeing activities (walk, buggy, horse riding) also can be major contributor because the number of sightseer has been sharply increased in the last 10 years in Inner Mongolia (more than 10 times). Therefore, we evaluated the effects of sightseeing activities on soil and vegetation in Hulunbuir grassland, a famous tourist spot, and revealed that not to mention the buggy and horse riding, but even the stamp reduced the amount and quality of the grass mainly though the compaction of the soil.

Development of Land Management System for Sustainable Urban and Rural Environment in the Sahel, West Africa. (Drs. IKAZAKI, KOSAKI)

The Sahel, south fringe of the Sahara Desert, is located at the semi-arid tropics and well known as drought-stricken region. However, there have been more floods in the last 20 years. In 2010, the number of flood victims finally reached one million, the same as drought victims. I made a hypothesis that this coincidental occurrence is caused by the decreased disaster-prevention functions (water reservoir function and water consumption function) of the agricultural ecosystem and am testing this hypothesis by conducting water dynamics studies using lysimeters and simulation models under a collaborative research with International Crops Research Institute for Semi-Arid Tropics (ICRISAT).

Development of Countermeasure against Desertification and its dissemination in the Sahel, West Africa (Dr. IKAZAKI)

The Sahel is still suffering from desertification. From the field studies under the collaborative project with ICRISAT and JIRCAS

Development of Soil Conservation Technique Both for Preserving Coral and Creating New Tourism Resources in Okinawa, Japan (Drs. IKAZAKI and KOSAKI)

In Okinawa, corals are being damaged by bleaching, feeding by Acanthaster planci and habitat degradation from seawater pollution, and all of which are closely related to the eroded soil materials from the sugarcane fields. The objective of this study, therefore, is to develop an agricultural technique which can control water erosion in the fields and also create new tourism resources conducting a collaborative research with Japan International Research Center for Agricultural Sciences (JIRCAS) and evaluating the effectiveness of Arachis hypogaea and
(2003-2011), I revealed the mechanism of desertification in the Sahel to be the loss of loose surface soil by wind erosion. Moreover, I developed a “do-nothing” countermeasure against desertification (“Fallow band system”) on the basis of its mechanism and proved it to be effective both for the prevention of desertification and the improvement of crop production in the Sahel. Now I am conducting a collaborative research with Research Institute for Humanity and Nature (RIHN) and investigating the effective dissemination method of “Fallow band system” using the rural sociological technique such as social network analysis.

2.2 Culture-Based Tourism Unit

A Study on the relation of Urban Planning and Big Events (Prof. AZUMA)

Big Events, such as the Olympic Games and the World Exposition, have contributed the implementation of urban development. This study demonstrates the role of big events in urban planning of London, Paris, Berlin, Barcelona, New York, Los Angeles and Tokyo in the historical context.

A Study of Modern Cultural Tourism in a City (Prof. AZUMA)

Since the 19th century, the urban tourism has developed with the modern arts—literature, drawing, music, fashion, architecture, and so on. A city is the reflection of its culture and people’s way of life. This study reveals the transition of cultural tourism in a city through the historical context.

A Study of the Tokyo Station (Prof. AZUMA)

The Tokyo Station, the centre of the railway network system in Japan, is restored in 2012. Although it was damaged by the air raid in the Second World War and repaired temporally, the station has been the symbol of Tokyo. This study includes the life of Kingo Tatsuno, an architect of the station, the design of the building and the present meaning of the station in the context of tourism.

Price Elasticity to Demand of Low Cost Transport Modes (Dr. SHIMIZU)

This study aims to analyze the effect of low cost transport services on demand change between two cities using price elasticity to demand indexes. The cases of Skymark Airlines and radical fare reduction in toll expressway system are analyzed. It is found out that the elasticities of these two services differs each other, and these are much larger than those of ordinal transport services.

Travel Path Identification Method Using Limited GPS Tracking Data (Dr. SHIMIZU)

This study aims to seek the method on travel path identification using this kind of limited GPS tracking data. In the experiment, 10 travelers with a same GPS receiver traveled to designate several tourism zones in Tokyo Central District by designate transport means. The locations of each traveler were detected every one second (hereinafter called “one second path”). Several imaginary set of coordinate detected every five minutes by each traveler were processed (hereinafter called “five minutes path”). The difference between a one second paths and each five minutes path, and conditions which cause the difference are analyzed. According to several analyses, we conclude that 1) travel paths by urban commuter railway can be precisely identified; 2) travel paths by bus cannot be well identified; 3) travel paths by walk can be roughly identified.

Traffic Safety Assessment on Trunk Road Network in Tourism Site Using Probe-Car Data (Dr. SHIMIZU)

This study aims to find road section with higher risk to traffic accident in weekends using the deceleration data collected from probe-cars running on the focused road network.

Social interference in Dakar informal transport and its implications in urban transport policies (Dr. SHIMIZU)

This study focuses on informal transport organization and its implications on urban transport policy. Informal transport in Senegal is operated by individual and groups or associations
among which we can identify some religious leaders known as Marabouts. The issue that the study addresses is the implication between Dakar urban mobility policy and socio-political aspects of informal transport. This study aims to address three elements: the difficult transition of Car Rapid and Njaga Njai (informal and current main urban transport systems) operators from informal to formal, the role of social interference in urban transport policy and the urban mobility situation.

"Urban Festival-Scape" Theory: It Contributes to the Creation of Public Spaces with a Role as Stages for Human Cultural Activities (Drs. KAWAHARA & OKAMURA)

We have numerous traditional festivities to pray to a god or for agricultural fertility in Japan. Recently, with its regional and traditional characteristics, these festivities are considered not only as Shinto rituals but also as events to maintain and develop local communities and to vitalize tourism. We assumed that observation of "Parade type festival (A festival where mikoshi, portable shrines, floats and dancers parade through roads, key junctions and community spaces)" will suggest that urban public space structured for the purpose of traffic convenience should have another role as a stage for human cultural activities or as an important viewing spot.

To pursue this study, we conducted surveys on 18 famous Japanese parade type festivals, and defined 1) the landscape containing symbolic facilities and geography of festival towns, 2) meanings and characteristics of urban space transformed or appeared at the time of festivals, and 3) the space consisted of portable shrines, dancers and spectators as "Urban festival-scape" and categorized into nine patterns as follows. (Festival-landscape, Parade Festival Area, Community-based Festival Area, Space for Performance, Space for Spectators, Festival Back-office, Conservation and Succession Festival Facilities, Festival Inspiration Facilities, and Equipment Designed with Consideration for Festivals)

In light of these research and analysis, we organized planning systems for conserving or controlling, rebuilding the above-mentioned urban festival-scape and spaces. According to this research, we hope that public spaces will be created with consideration for more flexible uses, and role as a space for human cultural activities.

Explore for a New Methodology and Planning Practice to Develop a Creative City in Ota Ward, Tokyo (Drs. OKAMURA and KAWAHARA)

This business-academia collaboration research aims at making a platform for creative industry, enhancing a chance to access to manufacturing, and creating valuable urban spaces in terms of industrial development and urban planning and design in an industrial quarter in Ota ward. This year we organized the 2nd "Ota Open Factory" on the 1st of December in 2012 to promote not only manufacturings that have paramount techniques and products but also attractiveness of town itself. In the process of this event we have been able to collaborate with city council and several bodies associated with manufacturing to create a new movement.

"Open House Events" as a Strategy for Grass-Roots Promotion of Cities (Dr. OKAMURA)

This study focuses on "open city events", in which multiple local resources simultaneously open to the general public; for instance open garden, open architecture (house), open factory, open studio etc. Among those "open house events" have spread across Europe and are now established as an annual festival held in September over the last two decades. As of now there are two major schemes in terms of the principle and a leading organisation. The first scheme is European Heritage Day initiated by the Council of Europe and the second is Open House Worldwide whose core is Open House London, and which is now taking place on a global level. On the basis of review and analysis of published reports, interviews with organiser of an "open house event" and observation of an event in London, Brussels and Paris, this study reveals their frameworks while exploring the possibility of using the following characteristics as a strategy for grass-roots promotion of cities: they have a highly established strategy for local citizens to participate; local residents and visitors can enjoy not only the buildings themselves but also the whole city; they can promote the expansion of the spectrum of citizens who are involved in architecture.
View Management Policy and its Implementation in London UK (Dr. OKAMURA)

Almost all cities including Tokyo and London are facing difficulty in conserving historical urban landscape. In Central London, where high-rise structures have been sequentially built, Greater London Authority has been taking some effective measures to manage the views after they established LVMF (London View Management Framework) in 2007. This study focuses on the transition of policy and management framework especially since the current Mayor of London Boris Johnson inaugurated in 2008. After the revision twice the regulation has been tightened as the width of viewing corridors, where height of buildings are normally controlled, were widened and moreover a few viewpoints were added.

Environmental infrastructure based on small watershed unit for local cities (Dr. KATAGIRI)

This study aims to develop planning method of urban infrastructure for shrinking cities based on watershed environment considering natural disaster. In fiscal 2012, literature research on green infrastructure and environmental database was carried out.

Study on the Green Infrastructure based on the Network of Former Agricultural Waterway in the Middle Tama River Watershed (Dr. KATAGIRI)

This study aims to propose green infrastructure based on former agricultural infrastructure. The Former network of agricultural waterway as the agricultural infrastructure and division of city district, as environmental unit of the agricultural society were used for the spatial analysis. The green network based on the waterway networks found in the target area shows the importance of the spatial composition of the base of agricultural society and the necessity of the designation of the production green as the core area of the green infrastructure.

Roadside Compact City (Dr. KATAGIRI)

The concept of compact city is an essential idea to establish visions for sustainable society in the decreasing population era we are facing today. Road Network Based Compact City is an interdisciplinary research project developed among the young researchers in the center for sustainable urban regeneration that focuses on shrinking regions in the rural areas, which are located along the arterial roads. The aim of the research is to maximize the utility or the potential these regions may partake due to the proximity to such access one can be delivered at highest level of service.

2.3 Tourism Policy and Tourism Information Unit

Study on Inbound Tourism Policy (Prof. HOMPO, Drs. SHIMIZU, KURATA, NAOI)

Study Group on Inbound Tourism Policy organized and managed by myself in corporation with Grunavi Research Institute Inc. and composed of Japan Tourism Agency, local governments, scholars and private sectors has been conducting a series of research on inbound tourism policy. This year it analyzed best practices by various foreign and domestic entities and basing upon this made “Interim Suggestion” for Japanese entities to improve their measures to be taken for the promotion of inbound tourism. The main point of the suggestion is to urgently and strongly enhance co-operation among related entities. A series of local seminars on “Interim Suggestion “has been held to make it widely public and to urge related entities to improve their inbound policy.
Development of a Web-Based Interactive Tour Planning Tool (Dr. KURATA)

Our research group has been working on the improvement of inbound tourism service using service engineering approaches. As a part of this project, we have developed a web-based interactive tour planning tool, called CT-Planner. This tool allows us to make our tour plans efficiently and interactively. This tool will be highly useful for overseas travelers, because this tool enables them to consult their tour plan from anywhere at anytime on the Web. In this fiscal year, we revised the tool into a server-client system, improved its user interface, revised its model of tourist preferences, and enriched its data (now covering Tokyo’s eight areas).

Development of Tourism Potential Maps (Dr. KURATA)

Making use of massive travel photo data uploaded online photo-sharing sites, we have been developing tourism potential maps, which visualize the locations where a number of tourists has got interested for some reasons. In this fiscal year, we developed a computational technique for discerning travel photos from other photos using exif and available meta data, with which we refined tourism potential maps.

Gamification in Tourism (Dr. KURATA)

We investigated current situations and problems of gamification (application of game design techniques for non-game context in order to motivate people) in the field of tourism. Especially, we focus on “geocaching”, in which anonymous people gamify tourism resources, and through a log analysis and a questionnaire survey, we revealed its growth mechanism and its participants’ motivations.

Surveys for Commercial and Industrial Development of Nijijima Village (Drs. KURATA, NAOI, ARIMA)

In cooperation with Nijijima’s Chamber of Commerce, we conducted three surveys for Nijijima Village—a consumer survey which targets local residents, a consumer satisfaction survey which targets tourists, and a commercial needs survey which targets potential consumers in Tokyo—in order to obtain basic data for considering local policies to realize sustainable economy in remote islands making use of tourism and urban-village interactions.

Visitors’ evaluations of aspects of local lives in historical districts (Drs. NAOI, KURATA)

This project supported by the Grant-in-Aid Scientific Research investigates the formation of visitors’ gaze on the aspects of local lives in historical districts. A referred journal article focusing on visitors’ and locals’ evaluation of such aspects has been accepted. This particular investigation employed questionnaire surveys to visitors and residents in the historical districts in Takayama-shi. The results indicate the importance of visitors’ perception of utilisation of the districts and some similarities and differences between visitors and residents in their views of the aspects of the local lives. Additionally, projected images of historical district were examined with use of content analysis of travel magazine articles about historical districts and tourism in Takayama-shi and Kurashiki-shi. The results illustrate that the historical districts had been depicted in relation with human activities, and that the focuses had shifted from historical elements to walking, accommodation and crafts. These outcomes were presented at an overseas conference.

Planning for management of urban tourism resources in urban settings with focus on local living culture in Naha-shi (Dr. NAOI)

As part of our project supported by the Grant-in-Aid Scientific Research and conducted in cooperation with University of the Ryukyus, a field survey about locals’ evaluation of tourist and local spaces in a shopping district in Naha-shi was performed. Forty-five local undergraduates participated in a photo-based participatory survey employing the caption evaluation method. They walked around the district, photographed of settings that were impressive as each of the predetermined four categories, which differ in the degree of their touristic and local characteristics/ They then provided their open-ended views of the photographed settings. The data analysis has been completed, and the results are expected to be published next fiscal year. Another investigation, which focuses on evaluation of the shopping street from visitors’ perspective, is also planned to be conducted then.
Effects of revisits on consumer satisfaction in island destinations: the case of Niijima-mura (Drs. NAOI, KURATA, ARIMA)

As part of a research project that aims to improve the customer convenience of commercial facilities in Niijima-mura, Tokyo, questionnaire surveys to visitors were conducted for six days in total in August and September. As part of the analysis, the effects of visitors’ revisits on their customer satisfaction were examined. This particular study also investigated the influences of visitors’ revisits on relationships between their customer satisfaction and their overall satisfaction with the islands as well as their revisit intention. The results show that, as a whole, repeat visitors’ satisfaction was higher than first-timers’. In the case of repeat visitors, compared to the one of first-timers, satisfaction with a narrower range of products is suggested to lead to higher overall satisfaction and stronger revisit intention. The particular importance of visitors’ satisfaction with accommodation is also implied. These findings were presented at a conference and have been published in an article.

Land use and population analysis in Greater Tokyo Metropolitan Area (Dr. AI)

Land use, national census, person trip survey data are analyzed 1) to grasp spatial distribution of land use such as residential area, commercial district, or agricultural lands; 2) to clarify demographic characteristics of local districts and their spatial distribution such as areas with high aging rate, areas experiencing population decrease; 3) to understand the transportation mode choices within local districts; and 4) to discuss the characteristics and challenging issues of local districts in population decrease and aging society. Commercial lands are found in areas close to railway stations, and residential areas along railway network. Noteworthy population increase is found in eastern part of downtown Tokyo, and decrease in hilly zones of Miura peninsula. Areas with high aging rate can be divided into areas where elderly persons are living alone - most of them are found in downtown- and areas where they live with their families - most of them are found in countryside. This finding suggests that we should discuss different methods to manage population aging issue in those different types of areas.

Estimation method of land use with demographic information (Dr. AI)

Land use data including building use is fundamental information for planning. Since surveying all the buildings is time-consuming and expensive task, a method to grasp land use pattern for planning is necessary. This study aims to develop a land use estimation method with demographic information surveyed by national census. Land cover data by remote sensing technology is also utilized to distinguish urbanized areas from forest or agricultural lands. Further estimation method is developed to label commercial areas, residential areas, and industrial areas to each local district within urbanized areas.

Cost calculation sheet for city planning restructuring urban area more compact (Drs. AI, KATAGIRI)

One of the possible solutions to restructure the urban form sustainable in population decrease and aging society is to make a city more compact. Among studies on costs regarding compact city plans, most of them imposes a precondition or only has weak user interface, it is still difficult for local governments to review their spatial plans and decides whether the plan is suitable for their city. This study proposes a cost calculation sheet based on spreadsheet software calculating how long does it take until the saving of maintenance cost by disengagement will balance the development cost of new sub centers. User will be asked to input population distribution, facility locations, unit cost of maintenance work or development constructions, and spatial plan to make a city compact. The sheet can also propose a plan based on input data.
3. Publications

3.1 Nature-Based Tourism Unit

Takashi KOSAKI
- Fuji K., Morioka, K., Hangs, R., Funakawa S., Kosaki T., and Anderson, D.W. 2013: Importance of climate and parent material on soil formation in Saskatchewan, Canada as revealed by soil solution studies. Pedologist, 57 (in press)

Toshio KIKUCHI
- KIKUCHI, T. (2013): Development of food tourism with the establishment of Kanasago buckwheat field in the northern part of Ibaraki prefecture. aromatopia, 117, pp86-89. (in Japanese)

Shinya NUMATA
- Iguchi, E., and Numata, S. (2013) Researchers’ attitudes toward


Takayuki ARIMA

Kenta IKAZAKI

3.2 Culture-Based Tourism Unit

Hideki AZUMA
- The cooperation to the making of NHK TV drama ‘The Opening of Tokyo Station’ (broadcast on the 29th October,2012)
- The cooperation to the making of BS-Fuji TV program ‘the Reopening of Tokyo Station’ (broadcast on the 28th October,2012)
- The cooperation to the performance of ‘The Architect of Tokyo Station:Tatsuno Kingo’(played by Karatsu Citizens Thoretical Company on the16th and 17th November,2012)

Tetsuo SHIMIZU
- Shimizu, T. Okano, Y. Kurata, Y. and Naoi, T.: Effects of Boredom on Revisit Intention, TTRA Asia Pacific Chapter Conference, 2012. (Selected by the abstract review)

Susumu KAWAHARA
- Susumu Kawahara(2013): Improvement of Shopping Street Spaces and Building Organizations in an Attempt to Attract Various Players and Their Activities to City Centers - The Ten-Year Community-based Endeavor to Develop Sannou Shopping Street in Tsuruoka City, Yamagata –,The International Journal of Tourism Science, 6, pp.25-33. (in Japanese)
- Misako Morita, Susumu Kawahara(2013): A Study on Concept and Promotion of Barrier-Free in Tourist Destinations: A Case
3.3 Tourism Policy and Tourism Information Unit

Yohei KURATA

Taketo NAOI

Hisatoshi Aik


• Ai, H. (2013) “Reviewing where to apply the road-side based compact city model.” Sustainable Urban Regeneration, Vol. 31, Center for Sustainable Urban Regeneration, the University of Tokyo. (in Japanese)


• Ai, H. (2013) “Spatial information and urban structure -a lecture memo-.” Sustainable Urban Regeneration, Vol. 30, Center for Sustainable Urban Regeneration, the University of Tokyo. (in Japanese)
4. Awards and Honors

Takashi KOSAKI


Kenta IKAZAKI


Susumu KAWAHARA

- Kusumoto Yoji Award 4th (2012) Second prize, Japan Society of Urban and Regional Planners: KAWAHARA, S “Improvement of Shopping Street Spaces and Building Organizations in an Attempt to Attract Various Players and Their Activities to City Centers - The Ten-Year Community-based Endeavor to Develop Sannou Shopping Street in Tsuruoka City, Yamagata -”

Yu OKAMURA

- Leading Scientist 2012, Department of Urban Environmental Sciences, Tokyo Metropolitan University.