A study on the regional landscape planning framework on the relationships between urban and rural areas: case study of Tokachi region, Hokkaido, Japan

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Abstract

In the Hokkaido Region, land use and the relationship between Urban and Rural area are still not clear; nevertheless, Local government has push forward with an original way of landscape planning in order to clarify this relationship. This paper presents how landscape planning can be used as a strategy to improve the Quality of Life's conditions of people.

Keywords: Hokkaido ground planning 1 and 2, rural landscape framework, cooperative partnership, top down system, bottom up system, community activities, urban area, rural area and natural area, agro-tourism.

1 Controlling the regional landscape in Japan

After the Second World War and during the Japanese economical growth period in the 80's, Japan experienced strong urban sprawl. Cities were expanded to suburbs surpassing even the countryside. As a consequence, farming areas transformed [1] to industrial land, resort facilities and big commercial centers. Therefore, traditional Japanese landscapes [2], which used to have clear differentiation between urban and rural areas, were lost eventually.

In this period in fact, whether projects where developed in urban or rural areas they where similar, and landscape's potential was forgotten. During the 90's several discussions among urban planners, institutions, government and citizens took place in the country, trying to improve quality of urban life.
Recently, a policy about landscape [3] was decided for the first time in Japan (2003) to improve urban culture and quality of life, with the particularity that at the same time, considerations on rural areas were also included, to preserve the agricultural life, its culture and its community. This policy will be enacted in 2004 [4] and the particularity consists that as a difference with other Japanese laws it is somehow flexible and allows interdisciplinary exchange. Nevertheless, before this first Ground Plan [5] was enacted the Tokachi local government decided to undertake a Regional Landscape planning [6] since 2000. As a result of this effort, in 2002 the landscape Guidelines [7] for Tokachi where settled. (Table 1.)

### 2 Historical outline of Hokkaido (Fig. 1)

Hokkaido is the northern island of Japan and the second main island, representing about 22% of the national territory. It is surrounded by three different seas; for instance the Sea of Japan, the Pacific Ocean, and the sea of Ohotuku. Originally some native people called Ainu lived in the island, until Japanese arrive 130 years ago. It has a population approx to 5,700,000 people, which represents 4.5% of the whole population of the country [8].
After the Meiji period (around 1800's), Hokkaido received foreign influence especially from The Unite States and Europe, introducing new knowledge and technology. Contrary to the rest of Japan, new villages were founded in Hokkaido using the gridiron planning system, including agricultural areas.

Recently, the local government and citizens have been getting interested in selecting buildings to be conserved, in order to protect industrial infrastructure, historical architecture and streetscapes, attempting to find out as well, values and characteristics of regional landscape [9].

This paper explores the planning framework on the regional landscape, studying the Tokachi region case, which is characterized in Hokkaido for being economically strong especially because of agricultural production and attractive nature. It describes the planning framework process and which actors are involved on it. It also investigates how organizations make solid relation between city, agriculture and nature and the advantages of managing regional landscape with the cooperation of local government and citizens, through community activities.

3 Methodology (Fig. 2)

In order to manage the regional landscapes, nowadays the municipal government of Hokkaido interacts with specialists, local authorities and people of urban and

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**Figure 1:** Landscape zone in Tokachi region.

A: Rural Landscape on Tokachi Valley
B: Grassy and Field Landscape near basin
C: Seashore Landscape Pacific Tokachi
D: Natural Landscape cross Hidaka Mountains
E: Natural Landscape National Park M.Taisetu
rural areas; and in a reduced scale with nonprofit organization (NPO) [9]. Nevertheless, decision-making process becomes extremely complicated, because all actors usually have different point of views. Therefore, municipal governments need to develop a system, which can contribute in the selection of projects and support of decisions.

![Landscape planning system diagram]

Figure 2: Landscape planning system.

In the future, it is expected to close the gap about differences in points of view from the different actors, through different types of activities that may target in the identification of common values [9].

The Tokachi region in Hokkaido was taken as example studying the following points:
- How to build up a planning framework of the regional landscape
- How cooperative organizations can participate in this framework.

In order to advance this study, the following questions were made as a starting reference:
1) Which could be the basic ideology for the general landscape plan of Hokkaido?
2) Which could be the main goal to approach the regional landscape planning in Tokachi?
3) How have been the Tokachi's region management process concerning to Landscape?
4) Which kind of organizations participate on landscape planning in the Tokachi region and how do they work?

4 Basic ideas related to regional landscape, the “fix-in” process

4.1 First stage

In Hokkaido, two phases to formulate The Regional Landscape Planning are followed. On a first stage, the target should be set up, considering the basic ideas included in the first Ground Plan (1999), for instance [5]:

![Urban Land Use, Rural Land Use, Natural Land Use diagram]
- Successions of philosophy value
- Sustainable community.
- Independent autonomy and action.
- Cooperation and collaboration, continuity.

4.2 Second stage

The second Ground Plan prepared between 2002 and 2003, was presented to the local government, highlighting the general concepts for a regional landscape development. This plan maintains the basic ideas established on the 1999's first plan but additionally proposes the following ones [9,10]:

+ Basic target: take more advantage of the beautiful northern country area.
+ Vision:
  - Landscape including efficient infrastructure with high quality materials.
  - Landscape based on people's life style local culture and community interests.
+ Approach:
  - Local government should be conscientious about the community's development process
  - Landscape should be understood beyond the city borders.
  - A long-term approach should be carried out, highlighting the value of the existing landscape and protecting the landscape of tomorrow.
+ Landscape planning's baseline of Hokkaido government:
  - Unite concepts and legal criteria under a clear policy-framework making use of specialist's knowledge.
  - Take into account citizen's opinion and support community's knowledge and skills' improvement through interactive activities.
  - Inclusion of Landscape planning into public projects seeking out its historical values.
  - To insist on the importance of independence when solving local problems, promoting as well, own identity elements, by technical and financial supports.

5 An approach to the ground planning

5.1 Questionnaire for residents

During 1997and 1998 Community organizations, residents, and entrepreneurs filled up the questionnaires prepared by the Hokkaido Government in such a way that the target population could express their interest on landscape planning topics. The main objective was to collect information about different points of view and opinions among diverse actors, in order to define the ideology for the Ground Plan and the way to promote the environmental landscape [8].

Some of the opinions from the different actors, after the questionnaire was applied included topics as the following ones:
- Intention to join in:
  Up-grading and Cleaning (28.6%) Event (25.1%) Tree planting (15.9%).
- Relation between administration and local residents’ encouragement:
Policy formulation (24.3%) financial support (21.4%) training and advice (17.7%).
- Cooperation: Volunteers (44.5%).
It was deduced by the questionnaires that local residents were interested in improving their environmental landscape conditions, have the intention to share roles and wanted to join the collaborative planning through community workshops.

5.2 System to supports regional organizations

The Hokkaido Government introduced different mechanisms [9] to construct strong relations with the regional organizations such as:
- System of information networks, including, forums, conferences and Internet websites.
- System of personnel training: sending professional landscape's advisers.
- Provision of technical support: system for landscape ordinance process.
- Financial support and ranking system of evaluating for organizations and community interested in control regional landscape.
- Constitution of landscape council in-charge of setting up the master regional plan and making basic policy and guideline of the public project plan.

6 Tokachi region's case: the way in which Hokkaido government understand regional landscape (Fig. 3)

The Hokkaido Government through the Ground Plan divided the whole territory into 10 landscape [5,8] types differentiated by natural conditions such as geographical feature, vegetation, weather, etc, as well as by social conditions, like history, culture, and industrial development. Therefore each landscape has various characters. The criterion to evaluate such landscape characteristic and the shape was classified in six types [8]:
- Basin, - seashore,
- Nature, - highway and roadside,
- Farm village, - and city.

Tokachi Region was classified into five zones [5,8] (fig.1) taking into account landscape diversity. It has one city, 13 towns and 3 villages. Figure 3 describes the relationship between urban area and rural area and between nature area and rural area. The main problematic identified was city-sprawl over rural areas especially when they develop commercial centers in roadsides from the city and the negative influences on the original natural environment. Additionally, figure 3 points out characteristically elements of the relation between agriculture and nature in Tokachi Valley.

Based on Ground Plan 1 guidelines, this paper proposes to focus on the following points.
- Modified landscape form (Problematic)
- Balance and harmonize urban and rural landscape design
- Environmental preservation
7 How to manage the Tokachi regional landscape?

The initial challenge was to make the local government, citizen and city planner to understand the regional landscape in a broad way, maximizing its potential. During 2000-02, the regional landscape planning was promoted in Tokachi [6]. Initially the process was advanced by the so-called "top-down system" following the first Ground Plan (1999) and setting Tokachi’s general guidelines [5,7] (2002). After the second Ground Plan was presented by the Hokkaido Government in 2003, the Tokachi authorities advanced the feedback process by
the so-called "bottom-up system". In the coming section, it is intended to explain which organizations took part of this process and how do they participate.

7.1 Which and how did organizations advance the feedback process?


A promotion committee was constituted as coordinator in Tokachi region, with the support of all the organizations [12] promoting conferences and local sectional meetings. These activities provided excellent chances to discuss on strength links among participants from different backgrounds. The main points...
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8 Conclusions

(1) A strategy to improve Quality of life (QOL) and to establish different relationship between urban and rural areas is to control the Regional Landscape. This alternative has a high potential still to be explored.

(2) In order to reach the proposals and visions on Landscape planning, local administrations needs to build partnership with organizations that may coordinate community activities, making use of specialist's knowledge.

(3) There are two steps of processes to realize The Regional Landscape Planning in Hokkaido. The first one where the basic ideology elements must be recognized, and the second stage or Planning's phase, in charge of proposing the basic target, vision, approach and Landscape's baseline.

(4) In the case of Tokachi region, a feedback process was advanced with the inclusion of several organizations, through a top-down and bottom-up system. (Fig. 4)

(5) Establishment of Committees to examine the whole region integrated by different professional areas enriched the discussion process and enlarged the analyzed scope.

(6) Citizens' participation should be open, encouraged by the organizations to define the common values in order to structure their own environment's landscape.

References

    kihonkeikaku.html
[12] Y. Oyanagi “A study on landscape Planning Process of the region of
     Hokkaido” (2001) Architectural Institute of Japan no.14
[13] Y. Oyanagi “Tokachi Region A study on landscape Planning Process of
     inhabitant” (2002-2005)