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**Rebuilding sustainable urban environment
in suffered towns and cities by the Great East Japan
Earthquake through nurturing commons via “town
management” scheme**

By

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Abstract¹:

This paper discusses the idea of urban commons under two components. One is what the essential commons factors are, usually supporting urban life and habitation, but in what way they are reconsidered from special vantage point of revealing experience of cities, such as Ishinomaki city under the disaster struck by the Great East Japan Earthquake in March 2011. The other is how to rebuild central urban districts of suffered areas augmented with commons conditions through tangible “town management” approach.

The first part reflects not only from the nature of urban commons but also from the sheer experience of this disaster. Those include the need of endowment of amenity in the city in terms of physical conditions, but one will find the paramount importance at how citizens identify their spaces as their own, self-reliance, and linkage among people. The second part relates to the application of the first part for realising commons in rebuilding of the city. The proposing method includes creating “town management company” based on stakeholders initiatives, introduction of a scheme separating right of use of spaces from their ownership but joint-use between stakeholders, independent operation of those spaces by that company at economically feasible principles but with necessary support from public sectors, and shared codes of design for new buildings and zoning of districts. Joint-use renders several rule-makings which really create new urban commons for the city.

¹ Comparing with the time of submitting the abstract, this paper is shifted into putting more weight on universal importance of city planning and management under the stationary economic situation and shrinking population stage as of Japan, at the same time paying attention on the aftermath of the crisis.

Key words: urban commons, central urban district, town management, separating right of use of spaces from their ownership, garden city concept

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Introduction

It was a great misery for Pacific coastal cities, towns, and villages in the north-eastern part of Japan struck tremendously by the Great East Japan Earthquake caused on 11th March 2011. However far before the earthquake and tsunami the situation of the cities in the country areas of Japan became economically severe conditioned because of a long recession, aging of population, and the trend of younger people leaving their home towns. Although reconstruction of the suffered areas has of course paramount importance, but simple restitution of the area and cities to the situation before the crisis does not mean a fundamental solution for real reconstruction of the areas. What we need is to reconstruct the cities addressing the challenges by underlining conditions. Urban development in Japan has been executed under the condition of high growth economy with which such assumptions lasted until 1990s. The task in that period was to respond to the population growth to support the city lives of increasing population because of agglomeration. Government provided mostly infrastructural improvements. At the same time cities have been flourishing under the lever of private initiatives. While the stationary economy has started and a shrinking demographic profile has really appeared, what we need is to adjust the city to such conditions. Urban planning should be based on different principle from what was needed at the time of expansion. In Japan legal frameworks and regulations are still based on the assumption in the past. What we need in the urban planning now is to maintain amenity for the urban life responding to the present conditions particularly with dwelling people's participatory and community-based project makings (Igarashi (2013)). Each local area should take responsibility to look after itself rather than dependence on the central or upper leadership lead by the government. Government has to seek its new role to support such initiatives. In principle self-control should be put on the basis for every town and city management. In the suffered areas by the last great earthquake, however the underlined assumption is the same, the cases are much more severe. What is proposed in the following discussion is constructing the city center of the suffered town on the basis of communal holding of the space for the purpose of not only creating better living environment but also recovering the economic activities of the city center.

1. What differs in the nature of urban commons from ordinary natural resource related commons?

Generally commons needed in the city is what local community provides and manages, however their ownership is sometimes public. Parks and open spaces are good examples, where people

enjoy and spend time at ease. Commons in the city are not restricted to such objects. Urban scenery and landscape are another. But one of the important urban commons is amenity. Amenity is the one whose attributes are location specific, landed and mostly privately provided, jointly-consumptive but prone to be congestive, indivisible and fixed supplied, and irreversible once lost. Those urban commons are mostly non-excludable but quasi-subtractible, therefore they are common-pool resources.

What differs in the nature of urban commons from ordinary natural resource related commons? In the case of such urban commons cited above the number of stakeholders is much larger and variable than the cases such as forestry, fishery, pasture, water resources, etc. At the same time the benefit derived from the commons are dispersed widely and multilayered. The challenge to keep such mechanism as commons is how to avoid free-riders. Another point is how to encourage and involve members and volunteers to cooperate for maintaining work for the commons. In case of natural resource related commons overuse and over exploitation of the commons resource is the heart of dilemma. On the other hand in case of urban commons continuous provision of commons service as a system rather than resource unit is much more difficult matter. In other words how to create the framework in the urban environment in order to lessen the degree of free-riding which hinders the level of maintenance and continuous provision of such commons services.

2. Cores of framework in terms of tangible designs and schemes for the reconstruction plan in the suffered areas

In Ishinomaki city after the earthquake the citizens firstly started up an independent council where they discussed the core of problems and a future path of city reconstruction. They invited Ms Mariko Saigo, a well-known city planner, to ask her the advice for the reconstruction of the central urban district. In her plan she put three important points. The first is that this process should be intended toward reconstruction rather than mere restitution. Because the aim is to reconstruct a city on self-control and sustainability basis in contrast to the usual dependent stance persistent in the regional areas in Japan. The second is that the target to be attained through the reconstruction process is making a "compact city" in terms of size, resource consumption, industrial base in compatible with shrinking population and environmental concerns. The third is that her scheme needs a clear assumption who takes an initiative in this process and future course. In order to cope with difficult economic situation even renewed district should adjust to future conditions. In that case more flexible mechanism is adopted so that the district as a whole can resist to the economic difficulty under the leadership and its guidance by a sole "management company" which is specially introduced. Individual asset holders are to release its ownership to that company in return for equity holdings of the company. Individual sites are

leased out at fixed period tenancy. The reason of introducing fix-period tenancy comes from the need of more flexible management adjusting to the economic condition comparing with fixing to landed interests. This is the principle of “separating right of use of spaces from their ownership.” Keeping such space in the block for the benefit of all participants is creating de facto commons or communal ownership of the space². In addition another important point of this approach is using a “community-based town management company (machizukuri kaisha)”. This is a strategic tool to avoid the second class tragedy of the commons in the way of free-riding and reluctant tendency for maintenance of commons as a system. (Exhibit 1)

This community-based company founded by the residents will reconstruct the city center with other concerned parties, sometimes with willing people who lost their homes in the suburban areas and areas close to the seashore struck by tsunami. They are going to make the town center a more beautiful, more energetic, and a safer space to live, work and spend free time in. In order to use the spaces in the city center more efficient, “smart shrink³” strategy will be adopted. Therefore the center can regain its role as an accumulation of shops and houses. The reconstruction cost of such plan will be much cheaper comparing to constructing large scale embankment to protect areas at risk from other tsunami and natural disasters. (Exhibit 2,3,4,5)

Saigo and co-designers have a successful track record at other cases, such as Marugamemachi commercial district at Takamatsu city, Nagahama city’s Kurokabe project and others. They are quite deft at planning and designing, so they are reliable. The point is that Saigo’s way of planning put a stress on community involvement rather than just an architectural planning. Saigo conducted workshops as many as the extent stakeholders of the district really came to think it was their project. Saigo also emphasizes that beauty of the district based not only architectural but also its regional values, and historical background of the district and industrial liveliness based upon regional resources.

3. Reminding the “garden city” concept for the future

In this regard it is worthwhile to go back to Ebenezer Howard’s garden city concept. It has mainly three principles. The first is that the land of a garden city is entirely bought and kept by a limited dividend company which is created by a group of people with funds collected by issuing bonds. Rents as revenues for the company eventually return to the garden city as a whole. The development value would pass to the entire community. The second point is that the countryside

² Saigo refers this scheme as ‘Soyu’ system following the Japanese legal concept, also one attribute of “iriai” akin to the German legal term, “Gesamteigentum.” In addition more active proponent of the Neo-Soyu system is Professor Igarashi. Because he is not only a lawyer but a legal professor who has been studying this concept and proposed necessary legal reforms.

³ The term “Smart Shrink” or “Shrink Smart” is following the European urban activity.

surrounding the city is kept perpetually as original agricultural lands, not to be urbanized. The third one is that when the garden city would reach its planned limit, another would be started a short distance away. Each would also be connected to the other by a rapid transit system, thus giving satellite cities surrounding the mother city. Howard called this system a Social City. From evaluating point of view you can have the following. The first is that Howard realized that through building Letchworth and Welwyn Garden City, the city of this concept could be feasible in economic terms. Namely development of land greatly enhances its value. The scheme turned the speculators' gain into the community benefit through the original company's constitution. The second is that he clearly had in mind that the purpose of constructing garden cities is to create the co-operative society⁴. The third is that in order to solve social problems it is important to employ knowledge and technology for merging city area and regional country with autonomy in terms of energy and resources. His concept has insightful influence to the present challenge facing the aftermath of this disaster as well. He proposed communal land holding using the trust mechanism even in terms of ordinary company governance, much later than his lifetime resulting in genuine "trust structure". The whole land holding at the garden city in the case of Letchworth was trusted to Letchworth Garden City Corporation, a public limited Company⁵. Another aspect which is noteworthy is the structure and function of that corporation. He proposed the concept as "semi-municipal enterprise". It needed a fairly long period of time to this transformation and finally became to have a status of "Letchworth Garden City Heritage Foundation". After swinging between a public orientation and a private inclination it finally follows Howard's intention. His choice is neither public nor private but independent and economically viable institution. There you can see a type of commons spirit in the real town management in a city scale. (Exhibit 6, 7)

Ending words

Ongoing project at Ishinomaki city is worthwhile to watch because it is a challenge to cope with the situation today and needs a far-sighted framework from the stand point of urban planning and management. Their approach incorporating commons concept is viewed as practical and wiser. Also it is important to come back to the basics of Howard's garden city at the time of tackling to

⁴ After Howard read E. Bellamy's utopian book *Looking backward 2000-1887* he made convictions as follows: "The next morning as I went up to the City from Stamford Hill I realised, as never before, the splendid possibilities of a new civilisation based on service to the community, and not on self-interest, at present the dominant motive. Then I determined to take such part as I could, however small it might be, in helping to bring a new civilization into being."

⁵ "The estate is legally vested in the names of four gentlemen of responsible position and of undoubted probity and honour, who hold it in trust, first, as a security for the debenture-holder, and secondly, in trust for the people of Garden City, ..., which it is intended to build thereon." cited from *Garden City of To-morrow*, p21.

install the town management scheme. There is a parallelism between the two. Garden city has to be positioned not just as an English trial in terms of “new town” but having a universal validity for district planning and town management. Particularly the management of the project and their following-ups should be revalued. These commons approaches should be reconsidered at the time of reconstructing urban spaces in the suffered areas.

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Exhibit 1 Urban renewal scheme

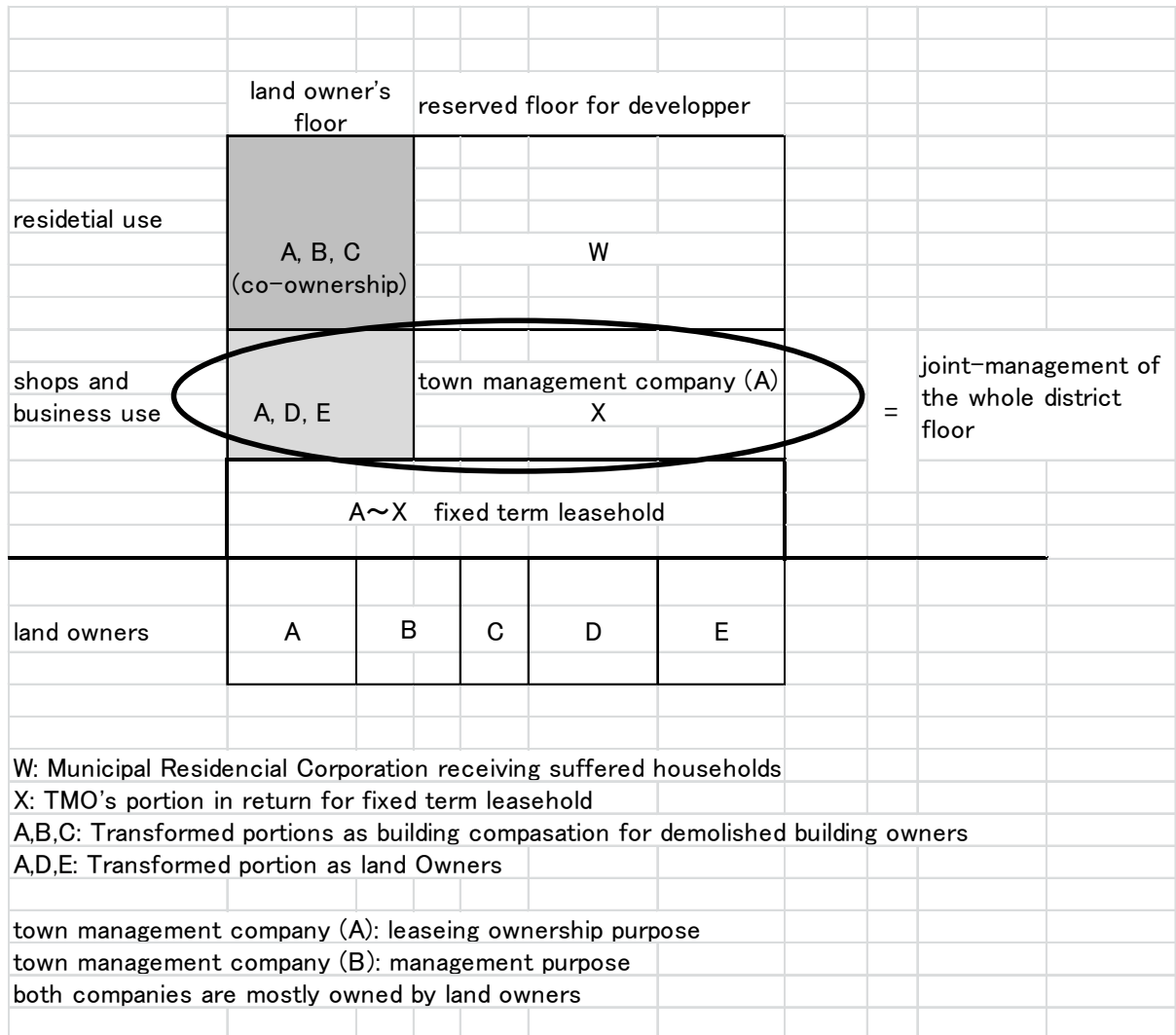
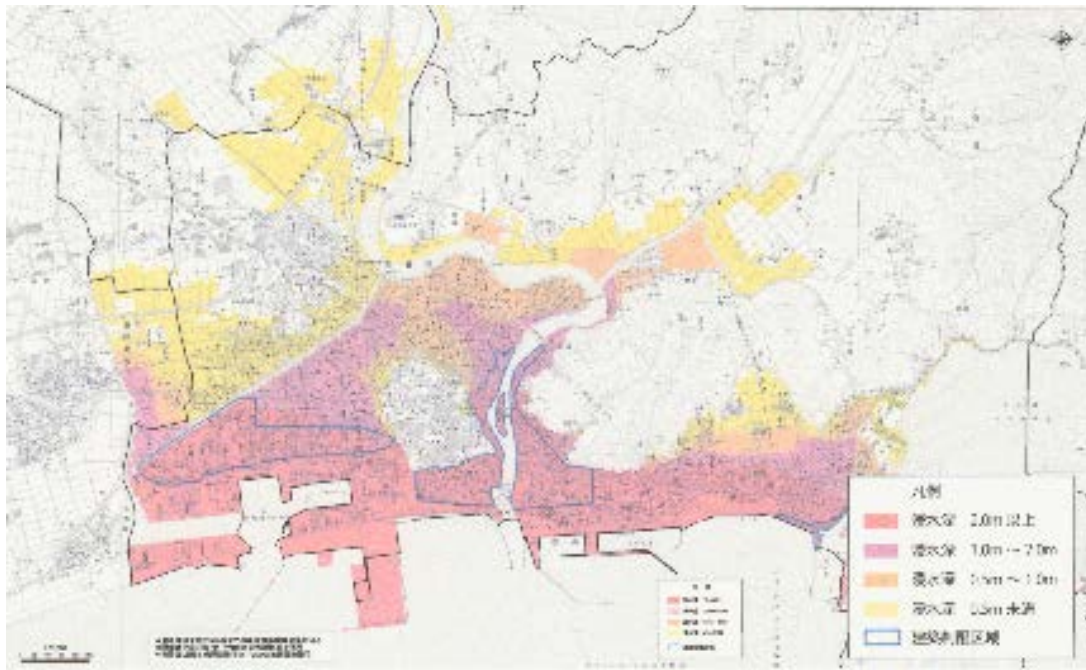


Exhibit 2 Inundated Area of Ishinomaki City

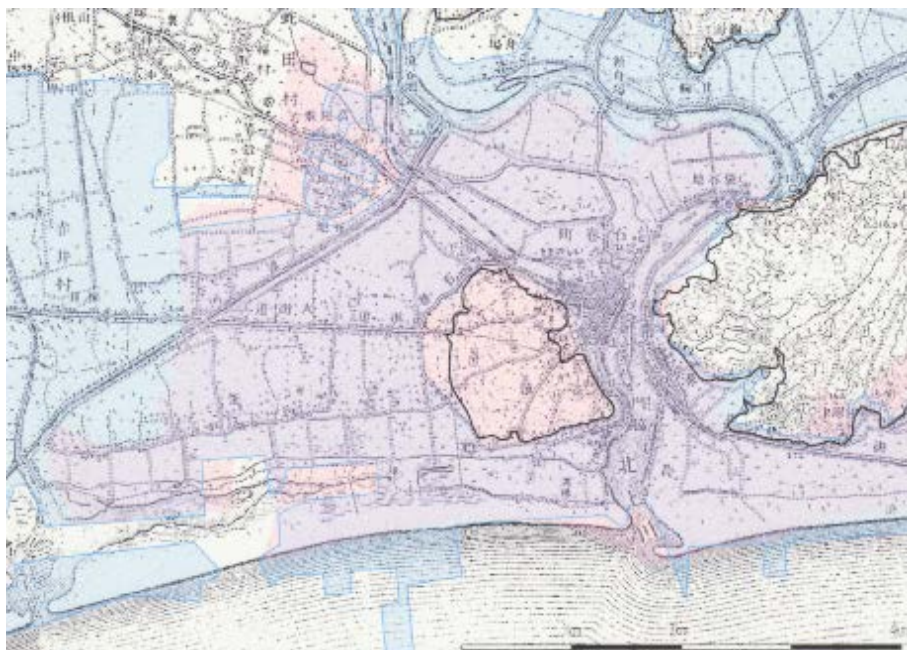


By

the courtesy of Saigo & Co.

Exhibit 3

The old map of Ishinomaki City (around 1900) overlapped by the inundation of March 2011 by the Tsunami



By the courtesy of Saigo & Co.

Exhibit 4 The old picture (the bird's eye view of Ishinomaki City) in the middle of 19th century

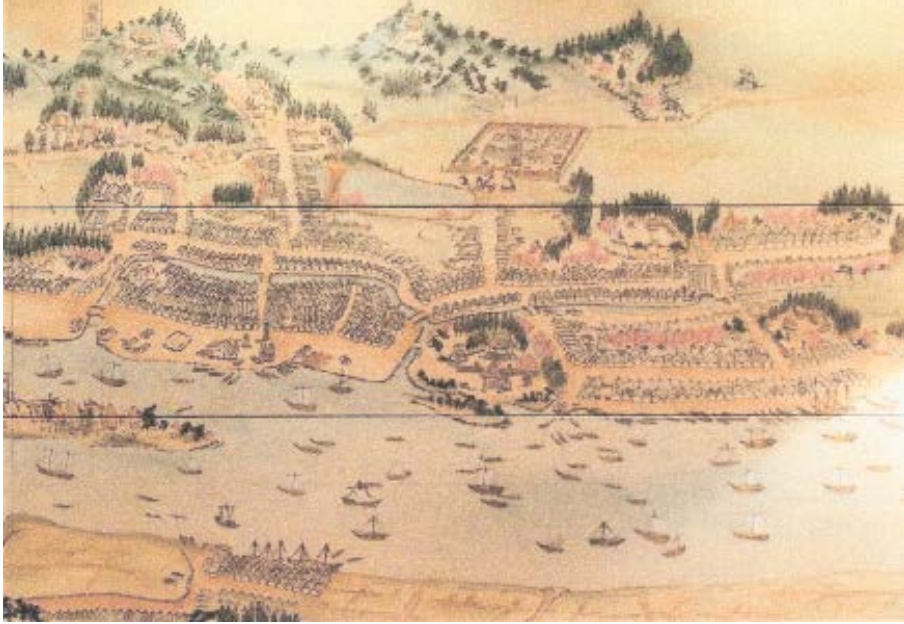
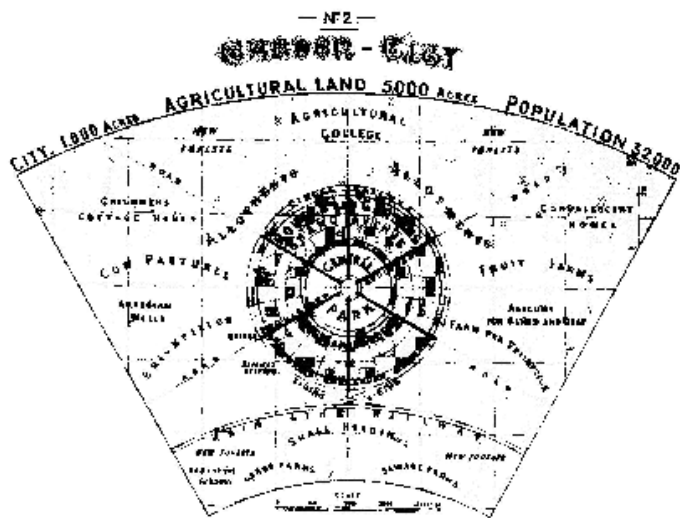


Exhibit 5 The location of reconstruction site



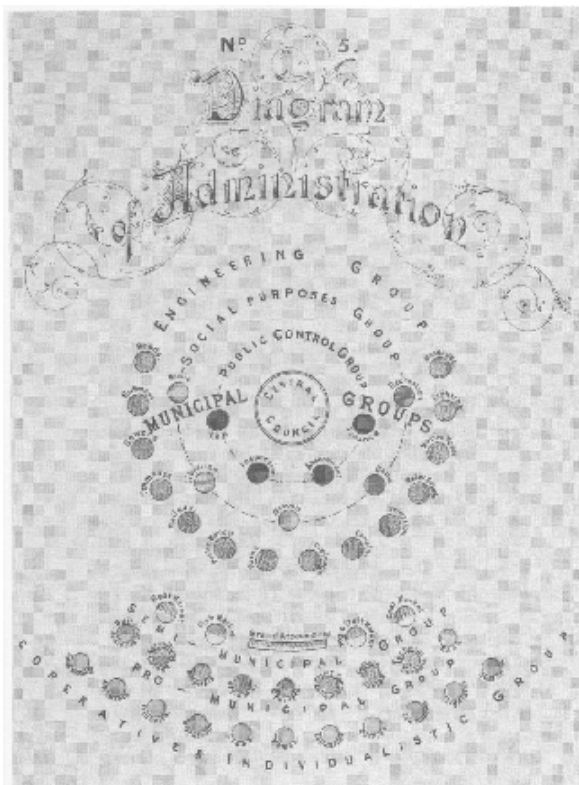
By the courtesy of Saigo & Co.

Exhibit 6 Diagram of the Garden City



Source: Howard (1898)

Exhibit 7
 Diagram of Administration of the Garden City



Source: Howard (1898)