

IMPROVEMENT OF VACANT HOUSES IN NARROW STREET AREA

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A survey conducted by the Ministry of Internal Affairs and Communications counted that as of the end of October 2013, there are 8.2 million vacant homes nationwide across Japan—a full 13.5% of all housing units.¹⁾ In order to undergo renovation, the vacant houses which are located in densely built areas should be rebuilt on the presumption that satisfies the building standards law. Furthermore, through the process of surveying, the appropriate and effective ways of enforcement and improvement of the vacant housing situations in densely built-up areas can be discerned.

Key Words : vacant houses, densely built-up areas, narrow street arrangement

1. INTRODUCTION

(1) Background

The vacant houses built during the bubble economy period should undergo extensive renovations or be demolished and rebuilt.²⁾ However, due to the costs and the series of 2 obstacles involved, elderly, who account for the majority of the inhabitants are reluctant to renovate their buildings, therefore the buildings in the densely built areas are superannuated.³⁾

One big obstacle is that all houses in the city-planning areas must be connected with a position road or a four-meter or wider road in Japan.

The rule called *sai-kenchiku-fuka* (no new construction allowed) rule. Such rules often apply to properties with road access of less than 2 meters in width. To remove the restriction, the property owner has to negotiate with neighbors to buy or lease parts of their land — which can be very difficult if the neighbors have already built properties that have reached their legal maximum limit within their building-land or floor-area ratios. In order to undergo renovation, the vacant houses which are located in densely built areas should be rebuilt on the presumption that satisfies the building standards law.

Since the building standards law, including that of the connecting roads law, was launched in 1950, so

houses built before the year 1950 should abide by the current law that is to widen the roads or to demolish the old vacant houses.

(2) Research Objectives

The main purpose of this research is to clarify ways to improve road maintenance in the narrow street areas by focusing on the follow-up researches in Tokyo Metropolitan area. Furthermore, through the process of surveying, the appropriate and effective ways of enforcement and improvement of the vacant housing situations in densely built-up areas can be discerned.

2. LITERATURE REVIEW

(1) Preceding Studies

There are some researches related to streets improvement like Narrow Street Improvement and Urban Renewal in Tokyo's 23 Wards and The Relation of the Narrow Street arrangement measures and the District Feature of the Built-up Area in a Community Rearrangement Work Area.⁴⁾ Both examines the ways of narrow streets improvement and redevelops the extensively built-up areas in the 23 wards of Tokyo.

Tukasa Iwata⁵⁾ concludes that there are three main

remedial measures related to vacant land improvement patterns depending on actual residential land split. First is conjugate existing vacant houses by condition of the joint roads and aging degree characteristics. Second is improvement proposal of idle land next to vacant houses. Third is for the case of idle areas without connecting road but parking lot is next to the public road. Solution to that pattern is enable car to make a turn and let local organization to run the newly built parking lot, which makes no adjacent area to get the path to it.

(2) Characterization of the Thesis

From the researches analyzing, there are many studies about the cause of the densely built-up areas and analysis featuring the district history in Tokyo area.

As seen from preceding studies, multiple researches on the relevant aspects of narrow street arrangement and spatial improvement are done. However few researches on the narrow street improvement focusing on vacant houses in the relation with the measurements progress status have been done. Therefore in this research the comparison between different arrangement measures and their appropriate way of enforcement will be investigated.

(3) Research Framework

The research will be preceded as the flow chart on Figure 1. After organizing the background and literature review, mechanism of house vacancy will be investigated. This includes the overview of the vacant house without resident household in Tokyo area and ratio of vacant houses with roads width less than 4m. Then convey comparison between different widths of roads measurement. By figure out the different status of vacant houses and intention of the owners that whether they want to reconstruct or not, clarify the problems and figure out the way to decrease the abandoned houses due to land restrictions.

Once all the necessary research finished, the analysis of the data will be carried out. By using the obtained data, the vacant housing problem in relation to narrow streets improvement measures will be considered.

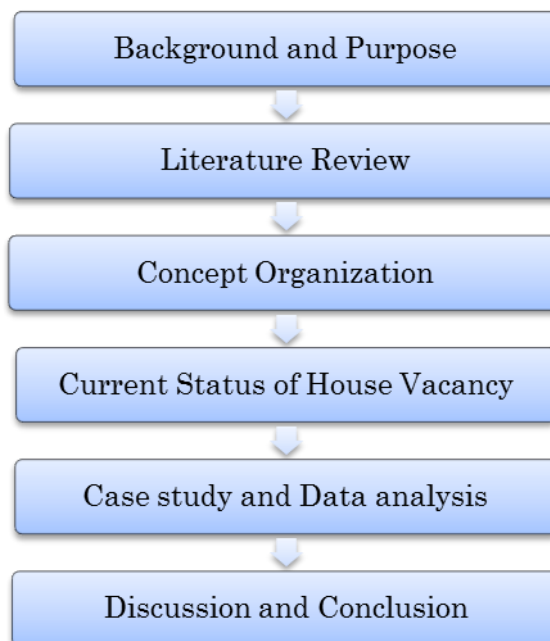


Fig.1 Flow of the research

3. BASIC CONCEPT

Before the main body of the research, related vocabularies and the basic concepts behind this topic will be explained

(1) Vacant houses

Houses (include temporary house for people to sleep) that want to be sold or leased by the owner but because of the land restrictions, those houses are not managed properly.

(2) Adjacent roads

In order to reconstruct the vacant houses, according to building standard law, adjacent roads should be at least 2m connecting the dwelling and connected with at least 4m of road or a position road.

(3) Other houses

Houses that have no intend to sale or rent. Nor it is not included to second home. Because of transference, hospitalization, or wait to be demolished, the houses are empty.

4. CURRENT STATUS OF VACANT HOUSES

(1) Mechanism of House Vacancy

According to the Institute for Tokyo Municipal Research, the mechanism of vacant houses can be roughly separated into three parts.6)

As shown in Fig.2, the first part for vacant houses is related to the imbalance of its supply and demand in the real estate market. The oversupply of vacant houses is one of the biggest reasons.

The origin concerns the change in the way people live nowadays. People tend to live separately, away from their old generation, thus the number of people per household becomes smaller. This creates a problem of second part that because after the death of the older generations, heirship of vacant houses gets complicated and becomes hard to solve.

Third part is the vicious circle of abandoned houses. One of the reasons is that the new owners have emotional attachment to the houses, therefore they want to keep the properties of the deceased or that they do not want to sell their old houses to the strangers. Another reason can be because of the high real estate tax. If they demolish vacant houses into empty lands, they would have to pay taxes nonetheless, so they would rather leave those houses in its original condition.

The third factor that contributes to the inability to manage the vacant houses properly is to do with the restriction of land usage. After the establishment of the new building standard law in 1950, houses must face connecting roads of at least 2 meters, in addition to being connected with at least 4 meters of road or a position road.

(2) Classification of Narrow Streets

Fig.3 illustrates different types of narrow streets which are unable to reconstruct the dwellings in that area.⁷⁾The first type of restriction is the adjacent road restriction which can be categorized as that the building is not connected to any roads. The Second type is the joint road restriction, in which houses are connected to roads, but those roads have widths less than 2m, standardized by the Road Traffic Act. Thereby unable to reconstruct the houses because of the building standards law. Third type is the private path restriction which is not permitted as a public road according to the Road Traffic Act.

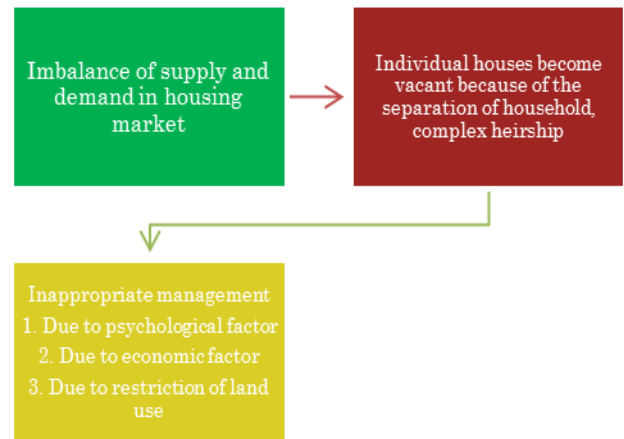


Fig.2 Mechanism of house vacancy

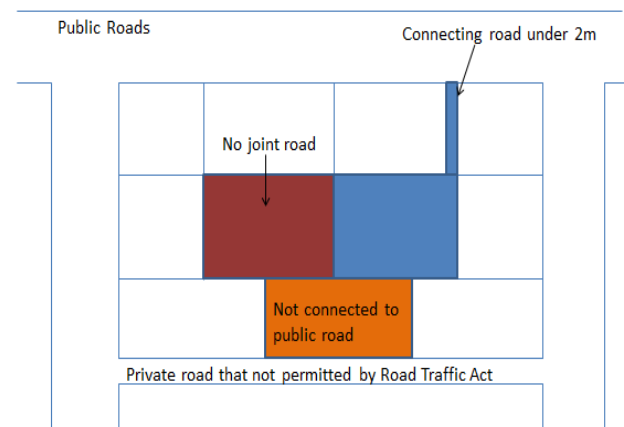


Fig.3 Classification of Narrow Streets

(3) Relationship between road width and vacant houses

According to Housing and Land Survey from Statics Bureau 2015, Table 1 and Table 2 shows the relationship between number of vacant houses and road width in those areas. The number shows in brackets means ratio of vacant houses in different road width. The number of vacant houses in this table defined as no resident live in those houses and dwellings that under construction or only for stay and no one lives.

By comparing ratio of vacant houses ratio in two tables, Komoro city has more ratio of vacant houses in all range of adjacent road. On the other hand, ratio of the vacant houses without adjacent road has most.

Table 1 Relationship between road width and number of vacant houses in Setagaya district.⁸⁾

Road width(m)	Number of houses in different road width	Number of vacant houses
No connection	390	80 (20.5%)
Under 2m	5360	720 (13.4%)
2m-4m	136050	15000 (11%)
4m-6m	158060	17330 (11%)
6m-10m	99590	13870 (13.9%)
Over 10m	51990	5600 (10.8%)

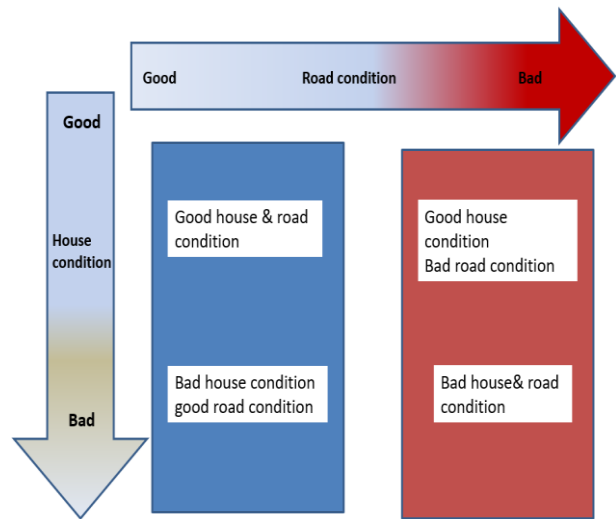


Fig.4 Classification of house conditions

Table 2 Relationship between road width and number of vacant houses in Komoro city.⁸⁾

Road width(m)	Number of houses in different road width	Number of vacant houses
No connection	1100	320 (29%)*
Under 2m	7320	1830 (25%)
2m-4m	360	120(33.3%)
4m-6m	5830	1040 (17.8%)
6m-10m	1970	430 (21.8%)
Over 10m	400	140 (35%)

Table 3 Different house types in Komoro city.⁸⁾

Total number of vacant houses	3,880
Second homes	730
Houses for rent	1,420
Houses for sale	80
Other houses	1,650
With corrosion, damage	640
Second homes	80
Houses for rent	190
Houses for sale	-
Other houses	370
Without corrosion, damage	3,250
Second homes	650
Houses for rent	1,230
Houses for sale	80
Other houses	1,290

(4) Categorization of different types of vacant houses

In this paper, abandoned houses are categorized as Fig.4. First type is vacant houses that in good road condition and without any damage or corrosion. Second type is vacant houses that in bad road conditions (For instance road width under 4m) but without any damage or corrosion. Third type is vacant houses with good road condition but bad road condition. Fourth type is vacant houses that with bad road condition and also with corrosion and damage.

5. CASE OF KOMORO CITY

(1) About Komoro city

Komoro city is located in eastern Nagano Prefecture, in the Chūbu region of Japan. As of 1 October 2016, the city had an estimated population of 42,679 and a population density of 433 persons per km². Its total area was 98.55 square kilometers.⁹⁾

(2) Vacant houses in Komoro city

As shown in Table 3, about 80% of the vacant houses are able to use without any renovation since most of the vacant houses are properly managed. In addition, vacant houses that not included in second

homes, for rent and sale (other houses) have most number of damage.

For vacant houses that for sale, there is no corrosion or damage. Which means that in order to deal with the vacant houses in Komoro city, measurements should be focused on reuse of houses and let more people to live in those places. Due to depopulation and aging society of that area, it is difficult to maintain the same vitality as before and that may be one of the reasons for vacant houses in Komoro city.

(3) Location Normalization Plan in Komoro city

In 2016, the government of Komoro city announced "Location Normalization Plan". The plan aims to gather urban function in certain area so that people can be induced to center of the city and reduce vacant houses in that area. As a result, not only it can reduce the vacant houses, but also by shrinking the function of whole city, it is easier for government to implement the plan and residents are able to have better access to hospitals, stations and offices. By the data of DID(Densely Inhabited District), government figure out territory where population density according to area by Ministry of Internal Affairs and Communications Statistics Bureau national census becomes more than 5,000 in the whole in more than 4,000 /km², to decide induction range.

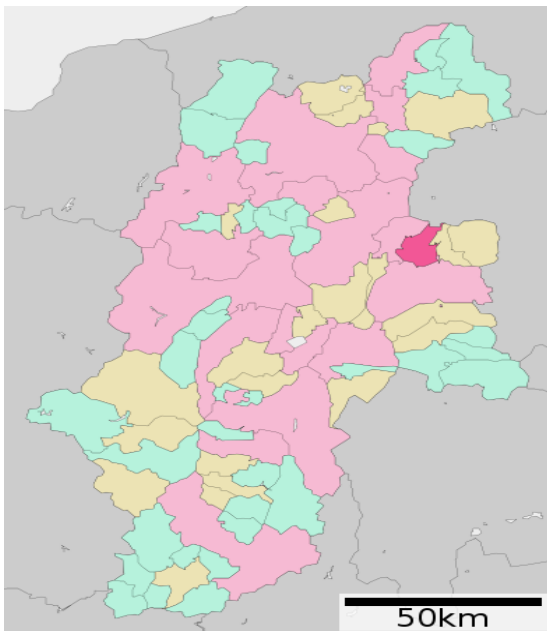


Fig.5 Location of Komoro in Nagano prefecture

6. RECENT APPROACH OF VACANT HOUSES IN NARROW STREET AREAS

There are some NPO organizations to solve vacant houses in narrow street areas. In Tsuruoka city, they lunched NPO to mediate between owners of vacant

houses that want to sell houses but because of the road restriction they are not able to reconstruct, and people who want to buy houses. By getting the abandoned houses through donation or bought in low price, NPO demolish the vacant houses and combine those small vacant lots.

While for the people who want to buy those houses in low price in this case, they need to give part of their land to expand the narrow streets where they cannot reconstruct before so that by this project, not only needs and demands of people can be solved but also contribute to vacant houses problems in that area.

7. FOLLOW UP

In the following months I will to start up with the investigation of vacant house map according to the evaluation standard. After accomplish the investigation, analyzation on residential awareness about vacant houses in the target area will be implemented. Not only continue to collecting data about the occupancy status of Komoro city but also need to decide the content of the questionnaire which can reflect the residents' awareness of the vacant houses and regional revitalization. After the completion of these steps, it will finally be taken into the analysis phase and draw a conclusion that whether the change of the road conditions will improves the vacant house situation and how it will actually affect revitalization.

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