

## Notes

- 1 According to *Yuhikaku*'s dictionary of economics, the term 'land market' is defined as follows: a place in which some pieces of land are traded and its price is decided. One of the peculiar characteristics of land is that the assessment of it varies with location and circumstance.
- 2 As for the word 'urbanization', a large number of studies had been conducted in the many geographical academic societies during the period of high economic growth. One of the main focuses of this discussion was the definition of the term 'urbanization'. One group had used the word in a sense to include change from 'urban' to 'more (or completely) urban' as well as a change from rural to urban, while the other group used the word only for change from rural to urban. However, the phenomenon of urbanization naturally includes both viewpoints. So, an intermediate point of view is now common. The results of some discussions were compiled in Aoki *et al.* (1979). Some examples of this sort of definition are found in Takano (1959), Takahashi *et al.* (1997), Morikawa (1990), and Yamaga (1981).
- 3 Teraya (1993), and Hino (1996) are good examples of analyzing the accumulation process of urban office functions using the number of branch offices of large companies based in big cities.
- 4 For example, Kikuchi and Moran (1990), Kikuchi (1994), and Kikuchi (1995).
- 5 Some notable examples of land-use studies from the viewpoint of land-use regulations include, Doi (1984), Katayanagi (1994), Kitamura *et al.* (1980), and Nagashima (1976).
- 6 Lewis and Maund (1976) proposed a conceptual framework to analyze particular

types of rural communities invaded by urban newcomers. In Japan, such communities are known as *konjuka* areas and have been documented by authors such as Sawa (1990) and Sawa and Takahashi, M. (1996).

7 Land ownership information is usually difficult to obtain in many countries (Bryant *et al.*, 1982).

8 The GIS package employed in this article was ARC/INFO Version 6 for SUN OS, distributed by ESRI corporation, USA.

9 About 80 % of the former built-up area was destroyed by an air raid in August in 1945.

10 Up until 1989, the highest priced piece of land in Maebashi city was "Maebashi 5-1" situated in front one of the major department stores in Maebashi city. Currently, the most expensive piece of land is "Maebashi 5-2", which surpassed "Maebashi 5-1" in 1989, and had a peak value of 2,650,000 yen/m<sup>2</sup> in 1992.

11 Many related articles concerning land re-adjustment programs have been conducted within the sphere of urban planning (Chitose, 1987; Murahashi, 1993).

12 According to certain statistics of urban planning in 1990, which covered 80 major cities in Japan with over 2,000 m<sup>2</sup> ADFU, the highest proportion of land developed under re-adjustment works to the total ADFU was achieved in Fukui city (74.2 %). Behind Fukui, Kasugai city (northern suburb of Nagoya city) (66.9 %), Tsukuba city (62.4 %) and other cities followed. Maebashi city was the sixth highest in Japan.

13 'Other uses' includes some huge artificially leveled lots with almost little vegetation such as schools, factories, residential estates in preparation, and sports stadiums.

14 In the data set, the varied possible urban uses of land were partitioned into only

three categories: 'building uses'; 'traffic facilities'; and 'other uses'. In this study, the author regards these three categories together as 'urban use'.

15 The sample area of Rokku (about 45.8 ha) are all included in the projected area for the Rokku land re-adjustment program (133.8 ha).

16 Morimoto (1991; 1993) are good examples of studies analyzing the increasing process of land abandonment.

17 According to the author's interview reports, farmers who sold some part of their land could purchase new land of more than three times the area in rural lots several kilometers away, where they could continue effective farming management.

18 In relations to the process of increasing numbers of parking lots, Sakai (1991) provided a detailed analysis for the central area of Kofu city, the capital city of Yamanashi prefecture.

19 The present highest building in Gunma prefecture is the Prefectural Government building (33 stories).