



HOKKAIDO UNIVERSITY

Title	戦後日本における人口分布変動と人口再配分政策
Author(s)	小田, 利勝
Citation	環境科学 : 北海道大学大学院環境科学研究科紀要, 6(1), 67-94
Issue Date	1983-12-20
Doc URL	https://hdl.handle.net/2115/37154
Type	departmental bulletin paper
File Information	6(1)_67-94.pdf



Population Distribution Changes and Redistribution Policy in Recent Japan⁽¹⁾

Toshikatsu Oda

Department of Regional Planning, Division of Environmental
Planning, Graduate School of Environmental Science,
Hokkaido University, Sapporo, 060

戦後日本における人口分布変動と人口再配分政策

小 田 利 勝

北海道大学大学院環境科学研究科地域計画学講座

TABLE OF CONTENTS

I. Introduction	68
II. Three Phases of Population Change After WWII in Japan	68
III. Population Distribution—Past and Present	71
(1) Population Distribution by Prefecture	71
(2) Rate of Population Increase by Prefecture	71
(3) Population Distribution by Region	75
(4) Population Distribution in Metropolitan Areas by Distance from Urban Center	75
(5) Urban-Rural Population	76
(6) Population Distribution by Population Size	76
IV. Population Mobility Transition	77
(1) Decline in Rate of Mobility	78
(2) Social Increase-Decrease by Prefecture	79
(3) Population Trends of Depopulated Areas	81
V. National Development Plan and Population Redistribution Policy in Contemporary Japan	84
(1) Population Distribution Problems and National Development Plan	84
(2) The Idea and Objectives of the Integrated Residence Policy	86
(3) The Model TEIJYU-KEN (Integrated Residence Area) Program	89
VI. Summary and Conclusion	90
VII. Acknowledgements	91

Received 17 Dec. 1982

1982年12月17日受理

I. Introduction

In order to maintain and foster economic and social development, it is a very important political task for Japan with limited land and a large population to promote appropriate population distribution directions.

According to the Annual Report on the National Land Use 1981 Edition [Kokudochō, 1981 b], more than half of the national land of Japan is occupied by mountains and about 70% by forests. Therefore, the inhabitable areas comprise of only 21% of national land. Even in the Big Three Metropolitan Areas, forests occupy more than half of the land area, and inhabitable area is only 30%.

The total population of Japan is 117 million (1980), making it the seventh in rank in the world [United Nations, 1979]. The population density is 314 persons/sq. km ranking next to Bangladesh among the nations of over 50 million population and the fifth in the nations above 5 million population. By comparison in terms of population density in the inhabitable areas, Japan is the most densely populated nation in the world.

The unbalanced population distribution of Japan is largely due to the geographical conditions mentioned above. Population has accumulated since former times in the lowland coastal districts, especially in the climatically mild districts on the Pacific Ocean coast. With industrialization after WWII, population and industries rapidly concentrated in these districts and consequently formed a large scale accumulation of population and industries named the "Pacific Belt" or the "Tōkaido Megalopolitan Area" mainly consisting of the Big Three Metropolitan Areas of Tokyo, Osaka and Nagoya (see Fig. 1).

However, in recent years, population mobility and distribution patterns have been changing. And it was based on the background of this population change that the "Integrated Residence Policy" as a planning methodology of the current National Development Plan was selected to promote population redistribution into the outer local regions.

The purpose of the present paper is to describe the change in migration, population distribution after WWII and the current redistribution policy in Japan.

II. Three Phases of Population Change After WWII in Japan

Japan has experienced drastic population changes for the thirty five years after WWII. The process of change can be roughly divided into three periods as follows⁽²⁾.

- 1st (1945-1960): over population problems under the stagnation of national economy after WWII.
- 2nd (1960-1970): promotion of population mobility under the high growth of national economy and the overcongestion-depopulation problem.
- 3rd (1970-): mobility transition under the low growth of national economy.

In the first period, because of 6.5 million repatriates with the end of the war and "Baby Boom" from 1947 to 1949 (the average number of birth 2.7 million per annum — standardized birth rate 3.03%, standardized natural increase rate 1.7%) population increased rapidly, and over population problems such as unemployment and food shortage became urgent tasks under the stagnation of national economy [Kōseishō Jinkōmondai Kenkyūjo, 1954].

In the second period, the Japanese economy kept a high growth rate (over 10% per annum), the so-called "miracle". Standardized birth rate declined remarkably to 1.5%, death rate to 0.6% and natural increase rate to 0.9%. However, the major characteristics of population change in this period, as will be mentioned in detail later, was that a great influx of population from the small cities, towns and villages of the whole country had continued to concentrate in the Big Three Metropolitan Areas.

Surplus population accumulated in the rural areas and a large number of young productive age persons born in the "Baby Boom" period became a major source of labor in supporting the rapid industrialization needs [Tachi *et. al.*, 1970]. Fifteen to sixteen year-old boys and girls fresh from secondary schools went into the Big Three Metropolitan Areas in the form of *Syūdan Syūshoku* (mass employment of young people), and not only young people but also young middle-age workers looking for better employment opportunities, better income and better education, continued to flow into the big cities in such immense volumes that Japanese demographers has come to call this "the great migration of race". As a result, over concentration problems in the big cities and depopulation problems in the agricultural and mountainous areas rapidly became serious at the same time.

In the third period, the pace of concentration of population into the big cities gradually slowed down and in the final stage, net migration into the big cities reduced into a negative figure. It is in this period that the return phenomena of population mobility, the so called "U-turn" and/or "J-turn" phenomenon⁽³⁾, became clear. This mobility transition shows that structural maintenance of a high density society has reached its limit [Oda, 1979]. Housing, traffic and environmental problems caused by continuous concentration of population in big cities through the second period mentioned above have become more and more severe, and external diseconomy has spread.

In this period also, along with the changes of international economic environments such as the "Nixon shock" and the "Oil shock", the Japanese economy has shifted to one of low growth from one of high growth and stagflation has set in [Tsuru, 1978]. In the domestic and international economic context, the consumption patterns and living consciousness of Japanese people have been changing. Qualitative values are more emphasized than quantitative ones and the desires of individual citizens are becoming varied. The recognition of the importance of the natural environment is increasing and people are becoming more interested in the quality of life and amenity [Oda, 1980].

In recent Japan, phrases like "Era of Local Community", "Regionalism", and

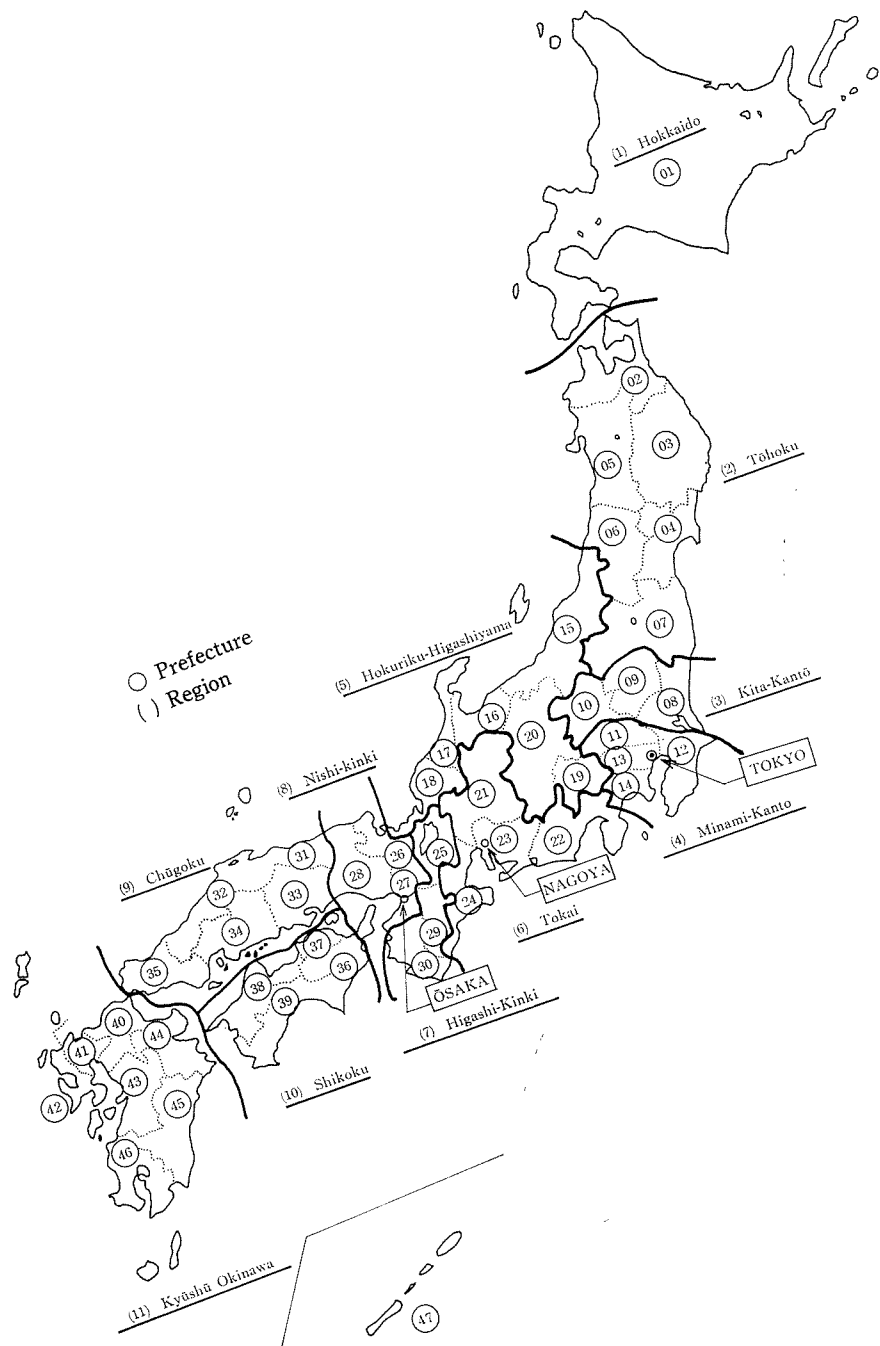


Fig. 1. Prefectures and Regions.

“Community Culture” have come into vogue and the strong orientation of people toward big cities have weakened. In the background of mobility transition, the change of the living interest of Japanese people can be pointed out.

However, as stated above, it does not mean that population distribution problems in recent Japan has already been solved. The development of local areas are still delayed and maldistribution of population and industries has not been settled yet. Housing, traffic, water resource and other environmental problems in big cities have become more urgent and in local areas provision of social facilities for daily life is insufficient. It is necessary for population redistribution into local areas to create various attractive conditions in such areas. The “Integrated Residence Policy” in the current National Development Plan was adopted to advance such conditions for population redistribution.

III. Population Distribution—Past and Present

(1) *Population Distribution by Prefecture*

Japan is divided into 47 prefectures (Fig. 1). According to the Report of the 1980 Population Census, population, population density and rate of increase are as shown in Table 1. In percentage of population by prefecture, Tokyo (13) leads with 9.9% (11.6 million) and following this is Osaka (27) 7.2%, Kanagawa (14) 5.9%, Aichi (23) 5.3%, Hokkaido (1) 4.8%, Saitama (11) 4.6% and the summed population of these six prefectures reaches 38% of the national total population.

In the case of population density (Table 1), 30 prefectures are under 299 persons/sq. km and 18 of them are under 199. Four prefectures are 300 to 399, three are 400 to 499, two are 500 to 599 and only one prefecture is 600 to 699 persons/sq. km. The population density of the remaining seven prefectures are as high as 900 or more persons/sq. km.

Heading the list are the five prefectures of Tokyo (13), Osaka (27), Kanagawa (14), Saitama (11) and Aichi (23) which rank high also in percentage of population. In terms of population density, all of them are 1,000 or more persons/sq. km. This shows the high population concentration in these five prefectures, especially in Tokyo (13) and Osaka (27).

(2) *Rate of Population Increase by Prefecture*

Table 1 and Fig. 2 show the rate of population increase by prefectures in five-year intervals since 1950. In the period from 1950 to 1955, six prefectures show an increase rate of 10% and over, particularly in Tokyo (13), Osaka (27) and Kanagawa (14), while seven prefectures show decreasing rates.

During the 1955–60 period, prefectures with decreasing population rapidly amounted to 26 which is about 55% of all prefectures. Population decreasing prefectures had spread not only in peripheral areas of rapid population increasing prefectures but also on a nationwide scale, paving the way for greater maldistribution of population.

It can be understood that a major change of population distribution in Japan

Table 1. Population distribution and increase rate by prefecture.

Population (1,000 person) 1980		Pop. Density person/km ²	'50~'55	'55~'60	'60~'65	'65~'70	'70~'75	'75~'80
JAPAN	117,057	314	7.1	4.7	5.2	5.5	6.9	4.6
① Hokkaido	5,576	71	11.1	5.6	2.6	0.2	3.0	4.5
② Aomori	1,524	159	7.8	3.2	-0.7	0.8	2.9	3.8
③ Iwate	1,422	93	6.0	1.5	-2.6	-2.8	1.0	2.6
④ Miyagi	2,082	286	3.8	0.9	0.6	3.8	7.5	6.5
⑤ Akita	1,257	108	3.0	-1.0	-4.2	-3.0	-0.7	2.0
⑥ Yamagata	1,252	134	-0.3	-2.4	-4.4	-3.0	-0.4	2.6
⑦ Fukushima	2,035	148	1.6	-2.1	-3.3	-1.9	1.3	3.3
⑧ Ibaraki	2,558	420	1.2	-0.8	0.4	4.3	9.3	9.2
⑨ Tochigi	1,792	279	-0.2	-2.2	0.5	3.9	7.5	5.5
⑩ Gunma	1,849	291	0.8	-2.2	1.7	3.3	5.9	5.2
⑪ Saitama	5,420	1,427	5.4	7.4	24.0	28.2	24.7	12.4
⑫ Chiba	4,735	923	3.1	4.6	17.2	24.6	23.2	14.1
⑬ Tōkyō	11,615	5,392	28.0	20.5	12.2	5.0	2.3	-0.5
⑭ Kanagawa	6,924	2,889	17.4	17.9	28.7	23.5	16.9	8.2
⑮ Niigata	2,451	195	0.5	-1.3	-1.8	-1.6	1.3	2.5
⑯ Toyama	1,103	260	1.2	1.1	-0.7	0.4	4.0	3.1
⑰ Ishikawa	1,119	267	0.9	0.7	0.7	2.2	6.7	4.6
⑱ Fukui	794	190	0.2	-0.2	-0.3	-0.8	3.9	2.7
⑲ Yamanashi	804	180	-0.5	-3.1	-2.4	-0.2	2.8	2.7
⑳ Nagano	2,083	153	-1.9	-2.0	-1.2	-0.1	3.1	3.3
㉑ Gifu	1,960	185	2.5	3.5	3.8	3.4	6.2	4.9
㉒ Shizuoka	3,447	443	7.2	4.0	5.7	6.1	7.1	4.2
㉓ Aichi	6,222	1,214	11.2	11.6	14.1	12.2	10.0	5.0
㉔ Mie	1,687	292	1.7	-0.0	2.0	1.9	5.4	3.7
㉕ Shiga	1,080	269	-0.9	-1.3	1.3	4.3	10.8	9.6
㉖ Kyōtō	2,527	548	5.6	3.0	5.5	7.0	7.8	4.2
㉗ Ōsaka	8,473	4,548	19.7	19.2	20.9	14.5	8.6	2.3
㉘ Hyōgo	5,145	615	9.4	7.9	10.3	8.3	6.9	3.1
㉙ Nara	1,209	328	1.7	0.5	5.7	12.6	15.8	12.2
㉚ Wakayama	1,088	230	2.5	-0.5	2.5	1.5	2.8	1.4
㉛ Tottori	604	173	2.3	-2.5	-3.2	-1.9	2.2	3.9
㉜ Shimane	785	118	1.8	-4.3	-7.6	-5.8	-0.6	2.1
㉝ Okayama	1,871	264	1.7	-1.1	-1.4	3.8	6.3	3.1
㉞ Hiroshima	2,739	324	3.2	1.6	4.4	6.8	8.6	3.5
㉟ Yamaguchi	1,587	260	4.5	-0.5	-3.7	-2.1	2.9	2.0
㊱ Tokushima	825	199	-0.0	-3.5	-3.8	-2.9	1.8	2.5
㊲ Kagawa	1,000	532	-0.2	-2.6	-2.0	0.8	5.9	4.0
㊳ Ehime	1,507	266	1.2	-2.6	-3.6	-2.0	3.3	2.8
㊴ Kōchi	831	117	1.0	-3.2	-4.9	-3.2	2.7	2.8
㊵ Fukuoka	4,554	919	9.3	3.8	-1.0	1.6	6.6	6.1
㊶ Saga	866	356	3.0	-3.2	-7.5	-3.8	-0.1	3.3
㊷ Nagasaki	1,591	387	6.2	0.7	-6.8	-4.3	0.1	1.2
㊸ Kumamoto	1,790	242	3.7	-2.1	-4.6	-4.0	0.9	4.4
㊹ Ōita	1,229	194	1.9	-2.9	-4.2	-2.7	3.0	3.2
㊺ Miyazaki	1,152	149	4.4	-0.4	-4.8	-2.7	3.2	6.1
㊻ Kagoshima	1,784	195	1.8	-4.0	-5.6	-6.7	-0.3	3.5
㊼ Okinawa	1,107	492	14.6	10.2	5.8	1.2	10.3	6.1
The number of prefecture which showed population decrease			7	26	25	20	5	1

Source: Population Census of Japan.

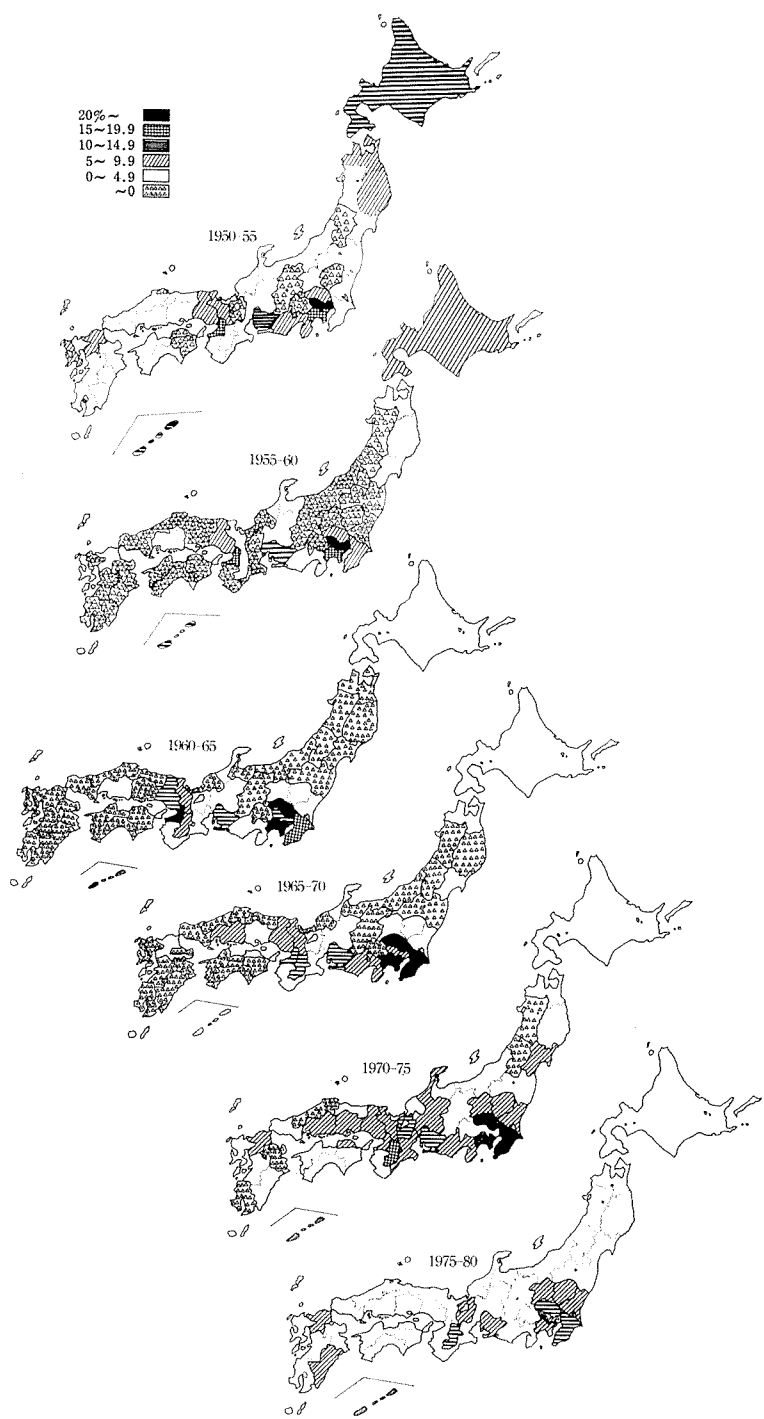


Fig. 2. Rates of population increase by prefecture.

had occurred during the ten years from 1955 to 1965. Average per annum rate of decrease of population decreasing prefectures went up to 3.5% during the 1960-65 period from 2% during the 1955-60 period (Table 1).

After 1960, the rate of increase in Aichi prefecture (23) rose. Along with this, increase rates in Saitama (11), Chiba (12), Kanagawa (14) and Nara (29), which are situated around the core metropolitan areas, rose drastically, especially in Saitama (11) and Chiba (12), which are included in the Tokyo Metropolitan Area.

Since 1965, population increase in the central prefectures of the Big Three Metropolitan Areas decelerated and the population in peripheral prefectures situated around central prefectures had rapidly increased. This shows that the population redistribution movement in Japan started in this period. During 1970-75, population decreasing prefectures amounted to only five and the average rate of decrease of population decreasing prefectures had declined to 0.4%.

During 1975-80, no prefectures showed a rate of increase beyond 20% and the range of increase-decrease rate reduced. All of the prefectures with decreased population during the 1970-75 period shifted to ones of population increase, and the number of population decreasing prefectures declined to only one, at a decreasing rate of only 0.5%. But the fact that this one population decreasing prefecture is Tokyo, which had the highest percentage and density of population in Japan, demonstrates a greater significance for the population redistribution movement in Japan than its decreasing figure of 0.5%.

In Tokyo, population had increased by 310,000 per annum for 10 years during the period of 1955-65, exceeded 10 million in 1965, and reached a peak of 11.7 million in 1975. Thereafter, except for slight fluctuations in population size, the general trend of population was either stagnant or decreasing. This evidently shows

Table 2. Population distribution by region.

Region	1950	1955	1960	1965	1970	1975	1980	Pop. Density (1980)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	314
(1) Hokkaido	5.1	5.3	5.3	5.2	5.0	4.8	4.8	71
(2) Tōhoku	10.7	10.4	9.9	9.2	8.6	8.2	8.2	143
(3) Kita-Kantō	6.2	5.8	5.4	5.2	5.1	5.2	5.3	329
(4) Minami-Kantō	15.5	17.1	18.9	21.2	23.0	24.2	24.5	2,126
(5) Hokuriku-Higashiyama	9.6	8.9	8.4	7.9	7.5	7.2	7.1	193
(6) Tōkai	10.5	10.5	10.7	11.0	11.3	11.4	11.4	455
(7) Higashi-Kinki	3.1	2.9	2.8	2.7	2.7	2.8	2.9	272
(8) Nishi-Kinki	10.7	11.3	12.1	13.2	13.9	14.0	13.8	1,087
(9) Chūgoku	8.1	7.8	7.4	6.9	6.7	6.6	6.5	238
(10) Shikoku	5.0	4.7	4.4	4.0	3.7	3.6	3.6	221
(11) Kyūshū-Okinawa	15.5	15.3	41.6	13.4	12.4	12.0	12.0	317
(4)+(6)+(8)	36.8	39.0	41.7	45.4	48.2	49.5	49.7	1,009

Source: Population Census of Japan.

that Tokyo has already lost the population absorption powers it had always possessed.

(3) *Population Distribution by Region*

Table 2 shows the population distribution by region (these division regions are the most commonly used in Japan. See Fig. 1). Three regions, (4) Minami-Kanto, (6) Tokai and (8) Nishi-Kinki which form the Big Three Metropolitan Areas, contain over half of the national total population. Although the rate of population increase-decrease by prefecture has changed largely since 1970, population distribution pattern by region has remained almost unchanged for the past 10 years.

(4) *Population Distribution in Metropolitan Areas by Distance from Urban Center*

Table 3 shows the number and the rate of population increase-decrease of the Big Three Metropolitan Areas by distance. In 1980, 26.34 million people live in Tokyo 50 km radius, 15.42 million people in Osaka 50 km radius and 7.83 million people in Nagoya 50 km radius, making total population equivalent to 42.3% of the national total population and a very high population density.

Table 3. Population distribution and rates of population increase to 50 km radius: Tōkyō, Osaka and Nagoya.

	Zone (km)	Population (1,000)		pct. of Pop.		person/km ²		Rates of Population Increase			
		1975	1980	1975 (%)	1980	1975	1980	1960- 1965	1965- 1970	1970- 1975	1975- 1980
Tōkyō 50 km radius	0—10	4,006	3,752	16.2	14.2	17,315	15,353	-1.4	-6.5	-6.5	-6.3
	10—20	7,696	7,860	31.1	29.8	9,583	9,647	25.3	11.9	6.2	2.1
	20—30	4,923	5,377	19.9	20.4	4,113	4,464	40.4	31.6	22.5	9.2
	30—40	5,038	5,754	20.3	21.8	2,217	2,519	37.0	43.6	29.7	14.2
	40—50	3,098	3,596	12.5	13.7	998	1,156	14.9	19.6	22.1	16.1
	Total	24,761	26,339	100.0	100.0	3,254	3,439	19.7	15.9	12.7	6.4
Ōsaka 50 km radius	0—10	4,570	4,401	30.7	28.5	11,995	11,470	12.3	2.2	-3.4	-3.7
	10—20	3,417	3,664	23.0	23.8	4,364	4,663	41.3	32.5	19.5	7.2
	20—30	2,160	2,341	14.5	15.2	2,269	2,448	20.7	25.0	22.3	8.4
	30—40	2,487	2,702	16.7	17.5	1,116	1,211	12.9	15.5	13.2	8.6
	40—50	2,246	2,315	15.1	15.0	736	759	4.5	5.2	6.7	3.1
	Total	14,880	15,422	100.0	100.0	2,012	2,082	16.9	13.0	9.0	3.6
Nagoya 50 km radius	0—10	2,161	2,155	29.1	27.5	6,085	6,049	13.8	6.3	2.5	-0.3
	10—20	1,666	1,821	22.4	23.3	1,729	1,883	24.3	23.4	19.6	9.3
	20—30	1,247	1,385	16.8	17.7	909	1,008	14.0	19.0	15.7	11.1
	30—40	1,757	1,840	23.6	23.5	867	905	8.7	6.5	7.5	4.7
	40—50	599	626	8.1	8.0	231	242	1.0	3.3	6.7	4.6
	Total	7,430	7,828	100.0	100.0	1,017	1,069	12.9	11.1	9.7	5.4

Source: Population Census of Japan.

Districts in which population has decreased are only 10 km radius from the center, while in the 10 km and over radius, though the rate of increase gradually declined, population continued to increase thus expanding the Metropolitan Areas.

(5) Urban-Rural Population

At present in Japan, there are 3,256 self-governing bodies which consist of 647 *Shi*'s (city) and 2,609 *Machi*'s (town) and *Mura*'s (village). Generally *Shi* is considered as urban district, and *Machi/Chō* and *Mura/Son* as rural district for the purpose of data collecting convenience.

Urban population is 89.2 million which is 76% of total population in 1980 and 47.57 million people that is 41% of total population live in the urban districts in the Big Three Metropolitan Areas (Table 4). As the number of cities in the Metropolitan Areas is 217, each city amounts to 220,000 population in such areas.

Observing the rate of population increase-decrease of urban rural districts since 1955 (Table 4), in recent years the rate of increase of urban population rapidly declined and rural population shifted to increase from decrease, especially so for the rate of urban population increase in the Big Three Metropolitan Areas which has fallen so abruptly that the rate of local urban population increase exceeded the rate of the metropolitan urban population for the first time.

Though rural population turned into an increasing trend, the rate of local rural population increase is still low and is half of the rate of population increase of the rural areas included in the Metropolitan Areas.

Table 4. Urban-Rural population.

		Population (10,000)						Rates of Population Increase				
		1955	1960	1965	1970	1975	1980	1955-1960	1960-1965	1965-1970	1970-1975	1975-1980
	Urban	5,321	5,933	6,692	7,485	8,497	8,920	9.3	12.8	11.8	12.6	5.0
	Rural	3,607	3,409	3,136	2,887	2,697	2,786	-2.6	-8.0	-7.9	-7.1	3.3
The Big Three Metropolitan Areas	Urban	2,391	2,889	3,423	3,986	4,539	4,757	15.7	18.5	16.4	13.9	4.8
	Rural	694	607	617	572	490	518	3.1	1.6	-7.3	-14.3	5.7
Other Areas	Urban	2,930	3,044	3,370	3,499	3,958	4,163	3.9	7.4	7.0	11.1	5.2
	Rural	2,913	2,802	2,518	2,315	2,207	2,268	-3.8	-10.1	-8.1	-6.1	2.8
National Total Population		9,003	9,430	9,921	10,467	11,194	11,706	4.7	5.2	5.5	6.9	4.6

Source: Population Census of Japan

Note: The Big Three Metropolitan Areas { Tōkyō area (Tōkyō, Chiba, Saitama and Kanagawa)
Nagoya area (Aichi and Mie)
Ōsaka area (Ōsaka, Kyōtō and Hyōgo)

(6) Population Distribution by Population Size

There are 193 cities (6% of total self-governing bodies) of more than 100,000 population where 66.07 million people (equivalent to 60% of national total population) live in. Cities of more than one million persons total nineteen in number and

occupy 20% of the national total population.

Table 5 shows a declining trend in the rate of population increase in 30,000 population and over cities, especially so in 100,000 and over population cities. However, the rate of increase of 50,000 to 500,000 population cities is still rather high and it shows that the population of intermediate cities has been increasing.

On the other hand, the rate of urban population increase of less than 50,000 population cities is still at a low level while in less than 30,000 population cities, a decreasing trend is observed. 30,000 population and over towns and villages in rural districts are mainly located near the Big Three Metropolitan Areas or capital cities of the respective prefectures. This shows that they are being developed as suburban housing districts.

It is in 10,000 or less population towns and villages, particularly in 5,000 or less population towns and villages, that population has consistently decreased since 1965.

Table 5. The Number and rates of population increase by population size.

Population Size		The Number of Cities, Towns & Villages (1980)	The Number of Population (10,000)	Pct. of Population (1980) (%)	Person/km ² (1980)	Rates of Pop. Increase		
						1965-1970 (%)	1970-1975	1975-1980
Urban Area (City)	1,000,000 and over	10	2,330	19.9	4,876	3.2	2.5	0.1
	500,000—1,000,000	9	574	4.9	2,395	14.1	14.9	6.2
	300,000— 500,000	36	1,371	11.7	1,468	13.1	13.6	7.4
	200,000— 300,000	42	1,035	8.8	1,133	17.3	12.6	7.6
	100,000— 200,000	96	1,297	11.1	1,077	15.0	12.7	7.0
	50,000— 100,000	207	1,411	12.1	584	10.6	11.9	7.4
	30,000— 50,000	198	777	6.6	251	0.3	4.7	2.9
	under 30,000	49	125	1.1	127	-8.5	-5.4	-1.8
Rural (Town & Village)	30,000 and over	59	228	1.9	727	41.4	37.4	24.1
	20,000— 30,000	229	554	4.7	251	3.2	8.0	8.2
	10,000— 20,000	811	1,130	9.7	138	-2.7	1.6	3.4
	5,000— 10,000	962	703	6.0	69	-8.0	-3.7	-1.1
	under 5,000	548	173	1.5	29	-14.0	-2.9	-5.0
Total		3,256	11,706	100.0	314	5.5	7.0	4.6

Source: Population Census of Japan.

IV. Population Mobility Transition⁽⁴⁾

The population distribution pattern of contemporary Japan started off with rapid and heavy in-migration into the Big Three Metropolitan Areas in the period of a high growth economy. However, in recent years the pattern of population mobility has taken on various trends.

(1) *Decline in Rate of Mobility*

According to the Annual Report of Population Mobility Based On Resident Regulation, the average number of migrants per annum who moved to other self-governing bodies during the period from 1955 to 1959 is 5.2 million (rate of mobility is 5.2%). After that, the number and rate of migration increased rapidly by 5.653 million (6.09%) in 1960, 7.381 million (7.56%) in 1965 and reached to 8.539 million (7.90%) in 1973. Since 1974, however, the number of migrants has been abruptly decreasing, that is 7.544 million (6.78%) in 1975, 7.292 million (6.37%) in 1978, 7.295 million (6.31%) in 1979, 7.079 million (6.05%) in 1980.

Observing the rate of mobility, a division can be made into intraprefectural and interprefectural migration, where the rate of interprefectural migration is de-

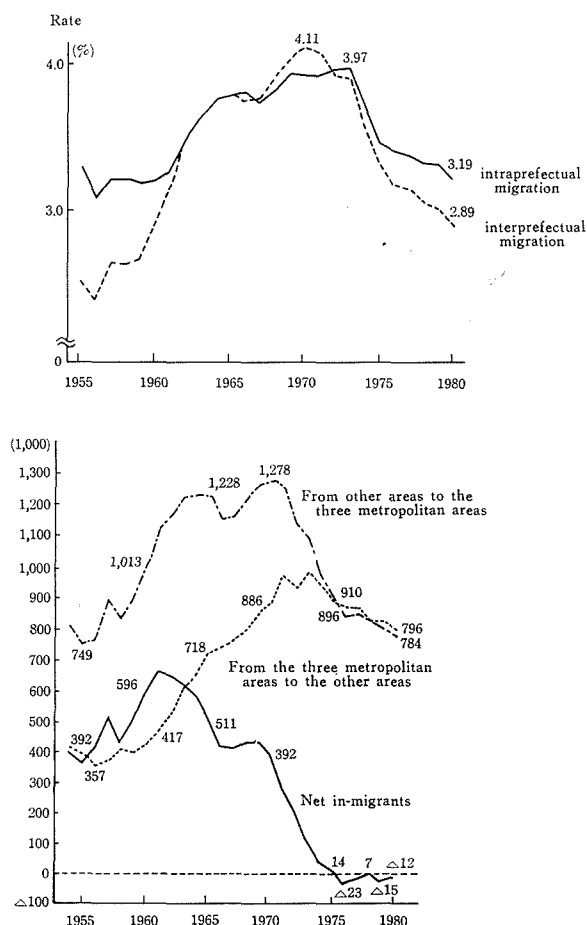


Fig. 3. Population mobility.

Source: Annual Report of Population Mobility Based on Resident Registration

Note: Three Metropolitan Areas Tokyo Area (Tōkyō, Chiba, Saitama & Kanagawa)

Nagoya Area (Aichi and Mie)

Ōsaka Area (Ōsaka, Kyōto and Hyōgo)

: Except Okinawa Prefecture

creasing more remarkably than the rate of intramigration decrease (Fig. 3). In other words, in recent Japan, it has been found that the rate of mobility as well as distance of migration has been decreasing.

The migration into the Big Three Metropolitan Areas from the remaining local areas through interprefectural migration reached its peak in 1971 and thereafter the number of migrants into the Big Three Metropolitan Areas immediately decreased. Since 1976, net migration of the Big Three Metropolitan Areas has taken on a negative tendency.

(2) *Social Increase-Decrease by Prefecture*

As has been already noted in section III, the rate of population increase-decrease by prefecture has been reducing. This is caused by the decrease in the volume of interprefectural migration.

Table 6 shows the rate of social increase-decrease by prefecture. In recent years, all of the central prefectures, Tokyo (13), Osaka (27) and Aichi (23), of the Big Three Metropolitan Areas show social decrease, and the rate of social increase of the peripheral prefectures Ibaraki (08), Chiba (12), Shiga (25) and Nara (29) situated near the Big Three Metropolitan Areas has been maintaining a high rate.

The changes of the rate of social increase by prefecture after 1955 are shown in Fig. 4. During the period from 1955 to 1960, it was only seven prefectures sited in the Big Three Metropolitan Areas which showed social increase, with especially high rates in Tokyo, Kanagawa, Osaka and Aichi. These tendencies continued around 1970 and thereafter prefectures with surplus net migration increased. This is a reflection of the fact that migration patterns have become varied in recent Japan, that is to say that migrants into the capital cities of local prefectures as well as the vicinity of intermediate cities are increasing.

During the period from 1975 to 1980, although there were twenty-eight prefectures (60% of total prefectures) which showed social decrease, these rates of social decrease were less than the rate of natural increase except in Tokyo, so that the rate of social decrease does not strongly influence the percentage of population by prefecture.

As noted above, in recent Japan, new patterns of population mobility have been established and a population redistribution movement has been taking place, namely the increase of migration into local areas from the Big Three Metropolitan Areas and short distance migration into capital cities and/or the intermediate cities as local core districts.

However, as has already pointed out in section III, it has not been found to have changed, on a large scale, the pattern of population distribution by regions. Though the tendency of population dispersion can be pointed out, it does not mean that "the great migration of race" as large a scale as that observed in the 1960s has in turn occurred toward the local areas from the Big Three Metropolitan Areas.

Big cities are as over-populated as before and the ill effects are causing the same urban problems in their surrounding areas as metropolitan areas expand. Also in the capital cities and core cities of local areas, various provisions such as

Table 6. Rates of natural-social increase by prefecture.

Prefectures	Rates of Natural Increase					Rates of Social Increase				
	1955- 1960 (%)	1960- 1965	1965- 1970	1970- 1975	1975- 1980	1955- 1960 (%)	1960- 1965	1965- 1970	1970- 1975	1975- 1980
JAPAN	5.3	5.3	5.7	6.4	4.6	—	—	—	—	—
① Hokkaido	6.7	6.2	5.7	6.0	4.8	-1.1	-3.5	-5.5	-3.1	-0.3
② Aomori	7.5	6.4	5.9	5.6	4.4	-4.3	-7.1	-5.1	-2.7	-0.7
③ Iwate	6.5	5.1	4.4	4.4	4.0	-4.9	-7.7	-7.2	-3.4	-1.3
④ Miyagi	6.3	4.9	4.7	5.6	5.1	-5.3	-4.3	-1.0	1.8	1.4
⑤ Akita	5.7	4.1	3.3	3.4	3.3	-6.7	-8.3	-6.3	-4.1	-1.3
⑥ Yamagata	4.8	3.5	2.8	3.2	3.2	-7.2	-7.8	-5.7	-3.7	-0.6
⑦ Fukushima	6.2	4.5	3.6	4.3	4.1	-8.3	-7.8	-5.5	-3.1	-0.8
⑧ Ibaragi	5.1	4.2	4.4	5.7	4.6	-5.9	-3.7	-0.2	3.5	4.6
⑨ Tochigi	5.1	4.1	4.3	5.8	4.7	-7.2	-3.6	-0.4	1.7	0.8
⑩ Gunma	4.6	4.2	4.6	5.7	4.4	-6.9	-2.4	-1.3	0.1	0.9
⑪ Saitama	5.3	6.8	9.3	10.2	6.4	2.3	17.3	19.0	14.5	6.0
⑫ Chiba	4.5	5.7	7.4	8.8	6.0	0.0	11.5	17.2	14.5	8.1
⑬ Tōkyō	6.0	7.4	7.8	7.3	4.5	14.5	4.8	-2.8	-5.0	-5.0
⑭ Kanagawa	6.1	8.1	9.4	9.5	6.1	11.9	20.6	14.1	7.4	2.2
⑮ Niigata	4.8	3.9	3.8	4.3	3.7	-6.0	-5.6	-5.4	-3.0	-1.3
⑯ Toyama	3.7	3.5	4.0	5.1	3.5	-2.6	-4.2	-3.6	-1.1	-0.5
⑰ Ishikawa	4.0	3.9	4.5	5.9	4.3	-3.2	-3.1	-2.3	0.8	0.3
⑱ Fukui	4.4	4.0	3.7	4.7	3.7	-4.4	-4.3	-4.6	-0.8	-1.0
⑲ Yamanashi	4.6	4.0	3.9	4.1	3.2	-7.7	-6.4	-4.0	-1.3	-0.5
⑳ Nagano	3.7	3.6	3.5	4.3	3.5	-5.6	-4.5	-3.6	-1.2	-0.2
㉑ Gifu	4.8	5.1	5.2	5.9	4.2	-1.6	-1.3	-1.7	0.3	0.7
㉒ Shizuoka	5.8	5.6	5.8	6.7	4.9	-1.8	0.1	0.2	0.4	-0.7
㉓ Aichi	5.3	6.9	7.8	8.5	5.7	6.3	7.1	4.5	1.5	-0.6
㉔ Mie	4.0	4.3	4.2	5.0	3.5	-4.0	-2.3	-2.3	0.4	0.2
㉕ Shiga	3.7	3.6	3.9	5.8	4.9	-5.0	-2.3	0.3	5.0	4.7
㉖ Kyōtō	3.6	4.5	5.5	6.3	4.3	-0.5	1.0	1.5	1.5	-0.1
㉗ Ōsaka	5.6	8.0	8.8	8.6	5.2	13.5	12.9	5.7	-0.0	-2.9
㉘ Hyōgo	4.9	5.8	6.4	7.0	4.6	2.9	4.5	1.9	-0.0	-1.6
㉙ Nara	3.5	4.0	5.2	6.5	4.4	-3.0	1.8	7.4	9.3	7.8
㉚ Wakayama	3.9	4.0	4.1	4.6	2.9	-4.4	-1.5	-2.6	1.7	-1.5
㉛ Tottori	4.4	3.1	2.4	3.5	3.1	-6.9	-6.3	-4.3	-1.3	0.8
㉜ Shimane	3.7	2.4	1.9	2.5	2.2	-8.0	-10.0	-7.7	-3.1	-0.1
㉝ Okayama	3.8	3.1	3.7	5.1	3.6	-5.0	-4.5	0.1	1.2	-0.4
㉞ Hiroshima	4.1	4.1	5.0	6.4	4.4	-2.5	0.4	1.8	2.2	-0.9
㉟ Yamaguchi	4.2	3.5	3.6	4.4	3.1	-4.7	-7.2	-5.7	-1.5	-1.0
㊱ Tokushima	4.0	2.8	2.4	3.2	2.6	-7.5	-6.6	-5.4	-1.5	-0.1
㊲ Kagawa	3.7	2.9	3.1	4.6	3.5	-6.3	-4.8	-2.3	1.3	0.5
㊳ Ehime	4.8	3.8	3.4	4.3	3.4	-7.4	-7.4	-5.4	-1.0	-0.5
㊴ Kōchi	3.3	2.4	1.9	2.9	2.0	-6.5	-7.3	-5.0	-0.1	0.8
㊵ Fukuoka	5.4	4.7	5.1	5.7	4.7	-1.6	-5.7	-3.5	0.9	1.4
㊶ Saga	5.7	4.0	3.6	3.9	3.6	-8.8	-11.5	-7.4	-4.0	-0.3
㊷ Nagasaki	7.0	5.2	4.5	4.6	3.8	-6.2	-12.0	-8.9	-4.5	-2.6
㊸ Kumamoto	5.6	4.0	3.3	3.4	3.4	-7.6	-8.6	-7.3	-2.6	1.0
㊹ Ōita	4.5	3.3	2.9	3.8	3.3	-7.4	-7.5	-5.6	-0.8	-0.0
㊺ Miyazaki	6.6	4.8	4.0	4.6	4.4	-7.0	-9.5	-6.7	-1.4	1.7
㊻ Kagoshima	6.4	4.1	2.8	2.7	2.7	-10.3	-9.7	-9.5	-3.0	0.8
㊼ Okinawa	12.2	9.7	8.6	9.1	7.6	-2.0	-4.0	-7.4	1.3	-1.5

Source: *Population of Japan* (Abridged Report Series No. 1—1980 Population Census).

housing and social facilities required to support large volumes of immigrants are still insufficient. And in districts suffering from drastic outflows of population in 1960s where although excessive population decrease has come to a halt, many functions of the community such as that of a social unit is already lost and population is now still decreasing.

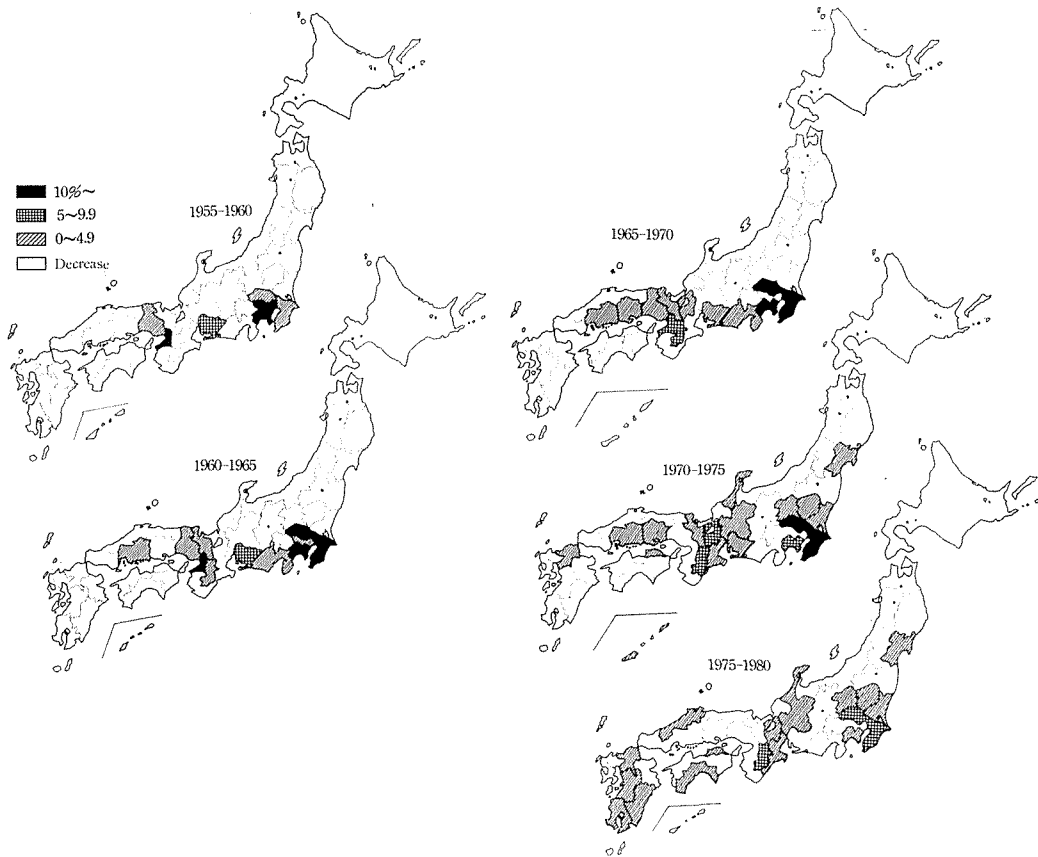


Fig. 4. Rates of social increase by prefecture.

(3) *Population Trends of Depopulated Areas*

Excessive loss of population, especially of young and young middle productive age population, had not only caused the deterioration of various essential functions of the community and restricted the development of the local industries but also weakened the financial power of the self-governing bodies. At the same time, social facilities of living environment have been delayed by their exodus, thus stimulating further excessive outflows. This situation is shown in Table 7.

It was in 1970, when depopulation problems of rural and mountainous districts became so critical, that the "The Act on Emergency Measures for Depopulated Areas" was established. Since the Act was temporary, "The Act on Special Measures for Depopulated Areas Development" was newly established in 1980 [Kokudochō, 1981 a].

Table 7. Population in

Region	Population in Depopulation Areas					Rates of Population Decrease				
	1960	1965	1970	1975	1980	1955- 1960	1960- 1965	1965- 1970	1970- 1975	1975- 1980
Hokkaido	1,872,027	1,636,285	1,352,542	1,139,133	1,066,969	1.1	12.6	17.3	15.8	6.3
Tōhoku	2,316,376	2,077,295	1,856,871	1,714,839	1,665,938	5.0	10.3	10.6	7.6	2.9
Kantō	815,561	721,014	637,477	586,181	564,453	5.5	11.6	11.6	8.0	3.7
Tōkai	288,566	250,767	216,193	200,064	188,922	6.6	13.1	13.8	7.5	5.6
Hokuriku	130,309	114,850	100,723	94,442	88,427	5.3	11.9	12.3	6.2	6.4
Kinki	414,575	357,052	310,505	288,755	270,727	5.8	13.9	13.0	7.0	6.2
Chūgoku	1,522,706	1,309,207	1,143,918	1,064,112	1,026,699	8.0	14.0	12.6	7.0	3.5
Shikoku	937,813	812,920	699,026	638,142	610,853	8.3	13.3	14.0	8.7	4.3
Kyūshū	3,960,452	3,367,990	2,895,728	2,674,057	2,621,220	5.1	15.0	14.0	7.7	2.0
Okinawa	105,107	93,329	74,303	63,298	60,894	—	11.2	20.4	14.8	3.8
Total (JAPAN)	12,363,492 (94,310,623)	10,740,709 (99,209,137)	9,287,286 (104,665,171)	8,463,023 (111,939,643)	8,165,102 (117,057,485)	5.2	13.1	13.5	8.9	3.5

Source: *Present Situation of Depopulated Area Development* [Kokudochō, 1981 a].

A "Depopulated Area" is designated when the self-governing body fulfil the following two requisites. (1) The rate of population decrease is more than 20% during the 1960-75 period based on population census. (2) Average index of financial power is less 0.37 per annum during 1976 to 1978.

There are 1,119 depopulated self governing bodies equivalent to 34.4% of national total bodies in 1981 (Table 8). These depopulated areas are distributed all over the country except the Tōkaidō Megalopolitan Area (Fig. 5) and 93% of them are mountainous villages, remote areas, snowy areas and remote islands. The total area of depopulated areas is 44.1% of national land with 8.17 million inhabitants (7% of national total population).

The rate of population decrease in total depopulated areas is slowing down by 3.5% from 1975 to 1980, however even in the past five years there were 142 self-governing bodies which showed a rate of decrease of 10% over. Fig. 6 shows the rate of increase-decrease of the Big Three Metropolitan Areas and depopulated areas.

It can be easily said that the trends of both rates are almost symmetrical. But looking at both trends carefully from 1960 to 1975, the rate of population decrease in depopulated areas did not decrease in spite of the fact that the rate of population increase in the Big Three Metropolitan Areas declined and that the

depopulated areas by region.

No. of Public Bodies			Population (1980)			Area (1980) km ²			Pop. Density person/km ²	
(a) No. of National total Public bodies	(b) No. of Depopu- lated Public bodies	(b)/(a) (%)	(c) Natio- nal total Public bodies	(d) Depopu- lated Public bodies	(d)/(c) (%)	(e) Natio- nal total Public bodies	(f) Depopu- lated Public bodies	(f)/(e) (%)	Total Public bodies (c)/(e)	Depopu- lated Public bodies (d)/(f)
212	139 (12.4)	65.6	5,576	1,067 (13.1)	19.1	83,517	49,878 (29.9)	59.7	67	21
518	190 (17.0)	36.7	12,024	1,666 (20.4)	13.9	78,940	33,852 (20.3)	43.4	154	49
647	106 (9.5)	16.4	37,782	564 (6.9)	1.5	49,744	12,172 (7.3)	24.5	760	46
332	41 (3.7)	12.3	13,315	189 (2.3)	1.4	28,827	6,612 (4.0)	22.9	462	29
111	19 (1.7)	17.1	3,017	88 (1.1)	2.9	12,638	2,296 (1.4)	18.2	239	39
326	51 (4.6)	15.6	19,522	271 (3.3)	1.4	27,281	7,313 (4.4)	26.8	716	37
319	167 (14.9)	52.4	7,586	1,027 (12.6)	13.5	31,771	17,917 (10.8)	56.4	239	57
216	103 (9.2)	47.7	4,163	611 (7.5)	14.7	18,800	10,296 (6.2)	54.8	221	59
521	283 (25.3)	54.3	12,965	2,621 (32.1)	20.0	41,399	25,216 (15.1)	60.9	313	104
53	20 (1.8)	37.7	1,107	61 (0.7)	5.5	2,250	1,033 (0.6)	45.9	492	59
3,255	1,119 (100.0)	34.4	117,057	8,165 (100.0)	7.0	377,708	166,585 (100.0)	44.1	310	49

rate of national total population increase rose. In other words, it can be pointed out that population redistribution movement in this period continued while depopulated areas were left behind. This has two implications: that the rate of population decrease in the depopulated areas thereafter rapidly decreased. This means, as noted before, that the population absorption power of the Big Three Metropolitan Areas became weak. The second implication is that a major part of the population who are able to move out has already left. The latter can be verified by the fact that aging is progressing rapidly in depopulated areas (Fig. 7). It is a coincidence that depopulated areas where the number of deaths exceeds the number of births, that is natural decrease, continued to increase in number (Table 8).

The population redistribution movement in recent Japan has been mainly caused by the limitation of population absorption power of the Big Three Metropolitan Areas as well as of 'stock population' of rural and mountainous areas in local regions.

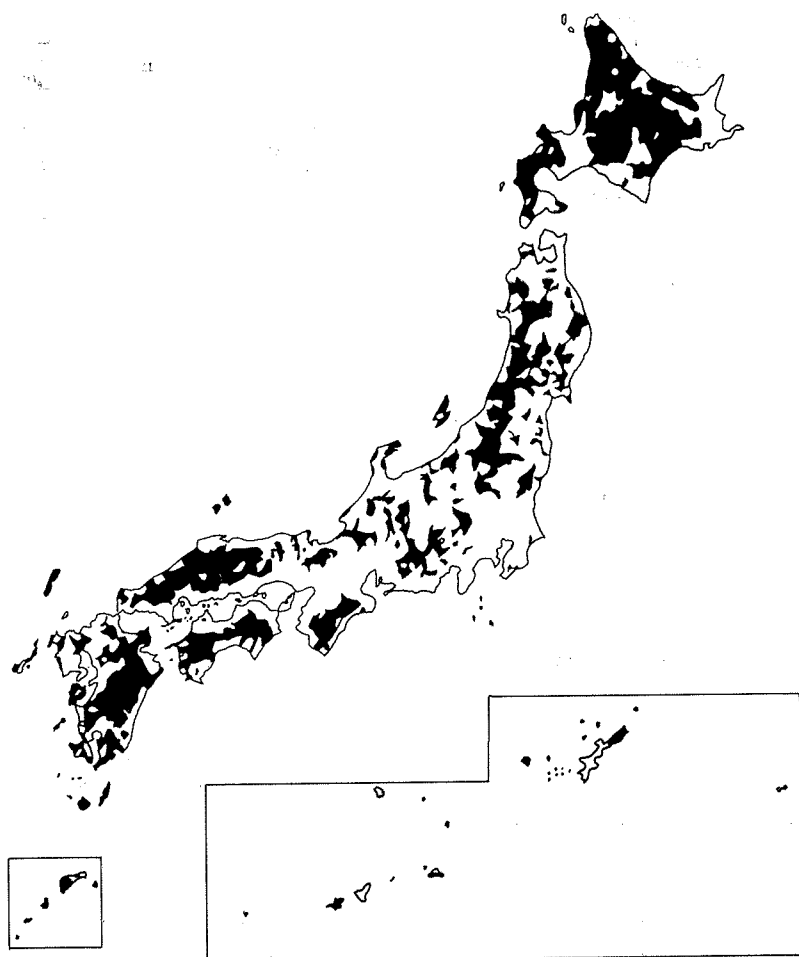


Fig. 5. Depopulated areas (1981) [Kokudochō, 1981 a].

V. National Development Plan and Population Redistribution Policies in Contemporary Japan

(1) *Population Distribution Problems and National Development Plan*

Since 1962 in Japan, when The First National Development Plan was formulated, dispersal of population and industry to local regions has always been the main issue in solving the overcongestion problems of the big cities, in particular Tokyo and Osaka, and adjustment of regional disparities. As actual strategic measures to realize this purpose, a “nodal system of development” and “large-scale projects for development” (in The Second National Development Plan approved in 1969) were adopted.

The “nodal system of development” is a developmental method to produce the chain effects of development to surrounding regions far and wide. Small and

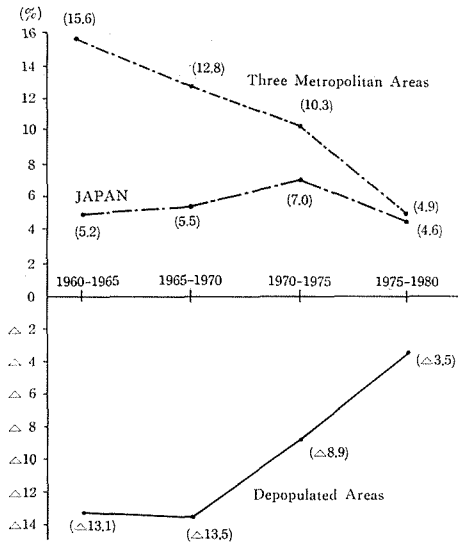


Fig. 6. Changes in rates of population increase [Kokudochō, 1981 a].

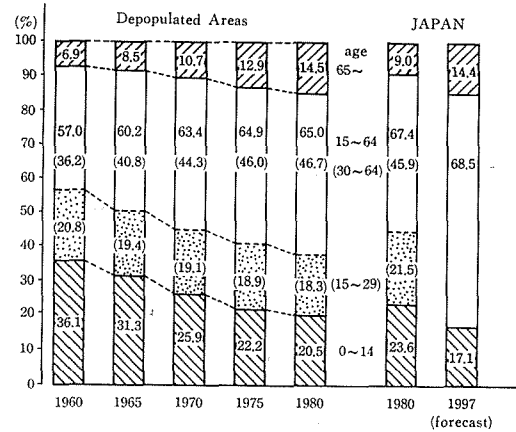


Fig. 7. Changes in percentage of population by age groups.

Table 8. Natural decrease of population in depopulated areas.

Region	(a) Total No. of Public Bodies	No. & Pct. of Depopulated Public Bodies Which Showed Natural Decrease of Population					
		1970		1975		1980	
		(b) No. of Public Bodies	(b)/(a) (%)	(c) No. of Public Bodies	(c)/(a) (%)	(d) No. of Public Bodies	(d)/(a) (%)
Hokkaido	139	0	0.0	5	3.6	18	12.9
Tōhoku	190	28	14.7	20	10.5	33	17.4
Kantō	106	41	38.7	43	40.6	52	49.1
Tokai	41	15	36.6	17	41.5	23	56.1
Hokuriku	19	7	36.8	4	21.1	7	36.8
Kinki	51	23	45.1	30	58.8	32	62.7
Chūgoku	167	104	62.3	95	56.9	116	69.5
Shikoku	103	55	53.4	55	53.4	69	67.0
Kyūshū	283	66	23.3	74	26.1	78	27.6
Okinawa	20	0	0	5	25.0	5	25.0
Total	1,119	339	30.3	348	31.1	433	38.7
Non-Depopulated Areas	2,136	55	2.6	39	1.8	107	5.0
JAPAN	3,255	394	12.1	387	11.9	540	16.6

Source: *Present Situation of Depopulated Area Development* [Kokudochō, 1981 a].

intermediate nodal points of development are allocated around some large scale nodal points which are established outside the Big Three Metropolitan Areas. These various scale nodal points are functionally linked to each other by transportation and communication systems. Twenty-one nodal points had been designated as industrial development regions in the whole country. "The large-scale projects" are measures fostering the nodal system of development which, in order to develop 'specific regions and subsequent and resultant development of many other communities nationwide with a final goal of well-balanced land use' and 'a nation wide network of new trunk railways, freeways, microwaves and so on for the purpose of realizing a functional system of central management and material flow' were planned for establishment. 'At the same time, activity zones were designated as the basic units of regional development, and spontaneous efforts by each regions for development and consolidation of these activity zones were expected.' [Kokudochō, 1979]. As for large scale projects, for example, the accumulation of central management functions in the seven metropolitan areas, development of large-scale industrial parks, construction of large-scale food and dairy products provision areas and development of large-scale sightseeing places were carried out.

As a result of these large-scale regional development policies, Japan has succeeded in attaining a rapid and high growth economy for exceeding the projected mark. 'Unfortunately, however, in these First and Second Plans, the objectives could not be achieved because of delays in the development of the activity zones' [Kokudochō, 1979]. In this planning process, instead overcongestion-depopulation problems continued to persist, and environmental and socio-cultural problems have become more serious.

In The Third National Development Plan, approved in 1977 after the re-examination of the Second Plan, the "Integrated Residence Policy" as a new planning methodology was selected to promote population growth in local regions. This is the first time that the population redistribution policy was explicitly defined as the central subject of the development plan after WWII in Japan.

(2) *The Idea and Objectives of the Integrated Residence Policy*

The fundamental recognition through the idea of Integrated Residence Policy is that gigantic cities have already reached the limits of growth, and current and future problems in the big cities cannot be managed with the usual countermeasures⁽⁶⁾. For example in Tokyo, though the number of immigrants has drastically decreased, population increase will be inevitable in the future because natural population increase will continue as young people who have moved into the cities and who are sons and daughters of immigrants who moved here in 1950s are reaching marriageable age to form households. As a result, the demand for housing and housing lots, schools and the other social facilities, water and energy, sewage and waste disposal facilities, transportation system and so on will further increased. However, it will be almost impossible to meet the increasing demand sufficiently because of the difficulty in securing sites and resources and because of financial limitations. It reflects the problems related to transfer of metropolitan functions

from capital Tokyo stated in the last chapter of the Third Plan [Kokudochō, 1979].

The aims of the Integrated Residence Policy is described in chapter III of the Plan in the following manner. 'The Integrated Residence Policy aims at establishing new planning living areas covering the entire country, firstly by improving and developing the comprehensive environment of each district to harmonize with the natural, living and productive environment based on its own historic and traditional culture, and secondly by coping with the over-congestion problem in big city and depopulation in local areas through the control of the over-concentration of population and industrial activities in large cities, while at the same time encouraging local development.' A planning unit for the Integrated Residence Policy is called a TEIJYŪ-KEN (there is no suitable English expression that fits the concept of the Japanese TEIJYŪ-KEN. The expression 'Integrated Residence Area' is used in some cases as a translation of TEIJYŪ-KEN).

TEIJYŪ-KEN is designated along the following three spatial hierarchical systems [Kokudochō, 1979].

(1) Community unit—this is the most basic unit of living areas which consist of roughly 50 to 100 neighboring households. 'In this community unit people reside, form their households and conduct their daily living activities. In fact a community unit is considered as a village in agricultural areas or a block used as a unit for environmental conservation of neighborhood in cities, where the daily lives of the residents and their productive activities have close relations geographically and functionally.' They amount to about 300,000 to 500,000 units nationwide.

(2) Residence area—this area is conceived to become a base of community formation and consists of more than two community units; for example, an elementary school unit area. There are about 20,000 to 30,000 such area nationwide. These residence areas collectively form the TEIJYŪ-KEN unit.

(3) TEIJYŪ-KEN—this is 'a conglomerate body of cities and rural areas, including mountains, lowlands, sea, etc.' There are approximately 200 to 300 TEIJYŪ-KENs nationwide. This TEIJYŪ-KEN is considered as 'a basic unitary zone of regional development, covering river basin areas, commuter areas and a wide range living area. Appropriate management of this type of zone makes possible the formation of a comprehensive habitation environment, based on stable national land conditions, through the mutual creative activities of each resident.'

Incidentally, with the background of a remarkable slowing down of the population concentration in the Big Three Metropolitan Areas, future population (in the Third Plan) rest on the assumption that migration will not occur after 1975 (stationary population). Even on that assumption, the future population of Tokyo and Osaka is estimated to increase considerably [Kokudochō, 1979]. As such, the Third Plan states that 'in order to solve the overcongestion and depopulation problems fundamentally and to develop and improve the comprehensive environment of human habitation so that each region can maintain its specific features, measures should be taken to control the population of Tokyo and Osaka areas to levels below the "stationary population" and to settle the population in other regions.'

In short, the purpose of the Integrated Residence Policy is to seek "deep saucers" receivable population and industries, in local regions, which big cups of certain metropolitan areas become incapable of accomodating. However, the Plan does not indicate on what and how to make this "deep saucer" but rather describe it as the 'improvement and development of each region which must be based fundamentally on choices and decisions by each region, and it is essential to make the most use of the natural and social conditions and traditional culture in each region as unique regional characteristics.' [Kokudochō, 1979].

Then, what kind of issues does each region attach importance to in order to encourage the settlement of people? The Model TEIJYŪ-KEN Program can be shown by an outline of the topics.

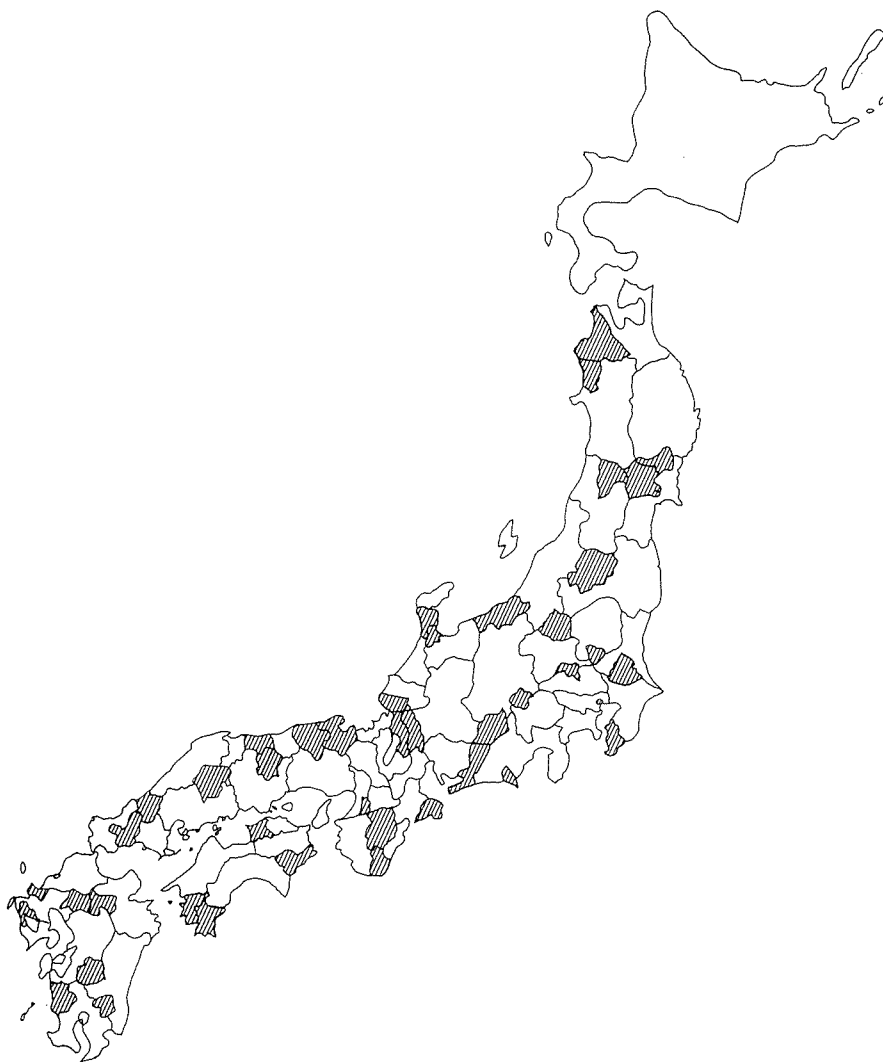


Fig. 8. Location of model TEIJYŪ-KENs [Modern TEIJYŪ-KEN kenkyū-kai, 1982].

(3) *The Model TEIJYŪ-KEN (Integrated Residence Area) Program*

The Model TEIJYŪ-KEN Program was formulated in 1979 based on the Integrated Residence Policy to promote the implementation of the model TEIJYŪ-KEN which should play a leading role in encouraging the settlement of population in local areas. Since 1979, 44 model TEIJYŪ-KENs (Fig. 8) have been selected and various programs have been enforced.

The population size of the model TEIJYŪ-KEN for 42 areas in 1980 was 78,000 to 670,000 and the average population was 258,000. The rate of population increase in most model TEIJYŪ-KEN were below the national average from 1970 to 1980 [Moderu TEIJYŪ-KEN Kenkyū-Kai, 1982]. However, as the program is still in its infant stage, the efficacy of the program can not be evaluated yet.

The model TEIJYŪ-KEN programs were formulated autonomously by the areas concerned and each area has the TEIJYŪ-KEN Charter in which is written the main themes to be developed (Fig. 9).

It can be understood that most areas of the model areas have great interest in the expansion of employment opportunities, followed by education-culture and

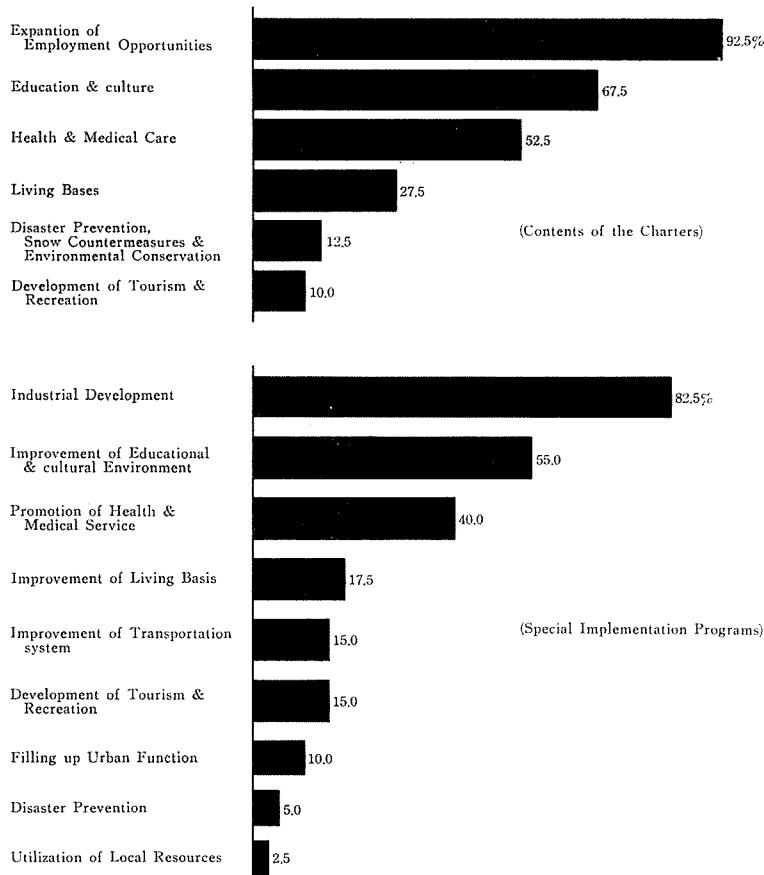


Fig. 9. Contents of the charters and the special implementation programs of the model TEIJYŪ-KENs.

health-medical care. Similarly, in the special implementation program for improving the TEIJYŪ-KEN of each model TEIJYŪ-KEN, the development of industries, education-culture and health promotion-medical care improvement are three major objectives. Furthermore, in the Model TEIJYŪ-KEN Program, a community action programme is introduced to promote subjective participation of community members (Table 9). The success or failure of these programs are very important considerations in the promotion of the Integrated Residence Policy.

Table 9. Number of cases of community action program.

Education/Culture	209 cases	29.3%
Security & Expansion of Employment Opportunity	149	20.8
Environmental Conservation	91	12.7
Sports & Recreation	79	11.0
Intimate Neighborhood	66	9.2
Health & Medical Care	56	7.8
Welfare	33	4.6
Crime Prevention	32	4.5
Others	1	0.1
Total	716	100.0

Source: [Moderu TEIJYŪ-KEN Kenkyū-kai, 1982].

Though the TEIJYŪ-KEN is a basic unitary zone of regional development, it does not mean that it is an area which is to be preponderantly given public investment as previously practiced in the First and Second Plan. However, a considerable part of the model TEIJYŪ-KEN selected by the self-governing bodies spontaneously are the areas where population decrease is progressing fairly, and the bodies expect to develop their underdeveloped district with financial support from the national government [Moderu TEIJYŪ-KEN Kenkyū-Kai, 1982].

This is a reflection of the existing local administrative system in Japan. It is well known that the local governments of Japan has neither sufficient financial power nor authority to execute their original plan spontaneously. In the Third Plan, it was strongly pointed out that 'it is necessary to establish a system through which local government can build up stable and safe comprehensive living environments, making the best use of regional characteristics based on the creativeness and efforts of people, while solidifying a foundation for the balanced development of the land.' However, there seems to be not just a few difficulties involved in the realization of the objectives because of the reasons mentioned above. These difficulties may represent the teething problems of a young program, so the success or failure of the Model TEIJYŪ-KEN program have yet to reveal its results in several years from now.

VI. Summary and Conclusion

In recent Japan, there has arisen new trends in population movement and distribution. The trends, namely, the slowing down in the rate of mobility and

a concentration in the metropolitan areas, are not always brought about by planned population distribution but the inevitable consequences of rapid and continuous concentration of population into the metropolitan areas for the past 35 years since WWII.

However, it does not mean that population maldistribution has been solved in contemporary Japan. Generally speaking, population concentration in big cities progresses rapidly but the movement of population dispersal is subdued. As a result, population in the big cities increases even faster because of a fairly high rate of natural increase caused by a highly reproductive population. Therefore overcongestion and depopulation problems cannot be easily resolved.

The Integrated Residence Policy adopted in the current National Development Plan, recognizing the limits of gigantic cities, aims at establishing a comprehensive environment for human living to combat the concentration of population in the big cities and excessive loss from rural areas in local regions. At present, the model TEIJYŪ-KEN ('the Integrated Residence Area') programs are being executed. Though the Integrated Residence Policy gives the priority of decision-making to the self-governing bodies to develop and improve their own territories, it does not necessarily mean that the intention of the national government is being realised because of the current administrative system of Japan. Until the public bodies come to acquire autonomy in economic, administrative and socio-cultural affairs, the Integrated Residence Policy will not achieve good results. In recent Japan, people, especially the young, have turned their interests to local industry, culture and administration, while the selfgoverning bodies in local regions are trying to create various attractiveness, as if in competition. These movements as well as that of securing employment opportunities seems to be the propelling power of population redistribution henceforth in Japan.

VII. Acknowledgements

The author expresses his appreciation to the following people for their kind advice and help towards the arrangement of this paper and the author's participation in the Thirteenth Summer Seminar in Population held at East-West Population Institute in Hawaii: Professor Kiyohide Seki of Nihon University (Professor Emeritus of Hokkaido University), Professor Etsuo Yamamura of the Department of Regional Planning, the Graduate School of Environmental Science, Hokkaido University, Professor Toshio Kuroda of Nihon University, Instructor Seiichi Kagaya and graduate student Shem Lai Yin of the Department of Regional Planning of the Graduate School of Environmental Science, Hokkaido University.

Annotations

(1) This paper is a modified form of the presentation on Population Distribution Problems and Distribution Policy in Japan presented at the Thirteenth Summer Seminar in Population held at the East-West Population Institute, East-West Center, Honolulu, Hawaii on May 31-July 2, 1982. The Author is grateful to Dr. Lee-Jay

Cho, Director of East-West Population Institute and to the coordinators, Professor Roland Fuchs of University of Hawaii, Professor Fu-Chen Lo of University of Pennsylvania, Dr. Robert Gardner and Dr. Peter C. Smith, Research associates of East-West Population Institute, and also to all the participants from Bangladesh, Canada, China, Hong Kong, Indonesia, Korea, Malaysia, Nepal, New Caledonia, Pakistan, Philippines, Sri Lanka, Taiwan, Thailand and U. S. A.

(2) Although there are some views on period divisions of the process of the population change after WWII in Japan, this paper deals with the process that is divided into three periods so as to summarize the entire population problem regarding the change of the birth-death rate and population mobility. With regard to establishing stages of population change after WWII in Japan, Kuroda, for example, presents the following view without specifying the exact period [Kuroda, 1979]. I: Drastic population increase caused by a great number of repatriates and the Baby Boom. II: Vital revolution of drastic decline in birth and death rate. III: The end of vital revolution and dramatic population mobility.

Otsuka also reviews a trend of researches on migration after WWII in Japan with the following period divisions [Otsuka, 1981]. I (1945-1955): over-populated problems. II (1955-1973): extremely high mobility with a high growth economy and occurrence of a number of socio-economic problems. III (1973-): low growth economy and optimal distribution policy.

(3) U-turn named metaphorically by Kuroda in 1968 means the population redistribution movement characterised by the decrease of population influx into metropolitan areas from non-metropolitan areas and the decrease of the number of migrants to non-metropolitan areas from metropolitan areas. This is the symbolic expression given to the phenomena of population dispersal in local areas [Kuroda, 1979]. The term 'J-turn' was coined with the intent to modify the concept of U-turn, and it refers to the phenomena of the population mobility from metropolitan areas to core urban areas of local regions in the vicinity of metropolitan areas [Kishimoto, 1978].

(4) The concept of mobility transition was put forward to clarify the current demographic transition, paying attention to the significance of the change of population mobility to elaborate the traditional demographic transition regarded as being similar to the vital transition/revolution [Zelinsky, 1971; Kuroda, 1970, 1978, 1979].

(5) On the details of the planning process contained in The Third National Development Plan, the following books are useful. [Kokudochō, 1980] is a collection of planners' retrospections and [Kokudochō, 1978-79] is a detailed explanation and material series of the Plan.

References

- Kokudochō (National Land Agency of Japan) (1978-1979): *Hito to Kokudo, Bessatsu* (People and National Land, extra number) 6 volumes, Kokudo Keikaku Kyōkai, Tokyo.
- Kokudochō (National Land Agency of Japan) (1979): *SANZENSO-The Third Comprehensive National Development Plan (English Edition)*.
- Kokudochō (National Land Agency of Japan) (1980): *Sanzensō No Hassō To Kōchiku* (Retrospec-

- tion on Ideas and Planning of the National Comprehensive Development Plan), Sōzō Shobō, Tokyo.
- Kokudochō (National Land Agency of Japan) (1981 a): *Kasotaisaku No Genkyo* (Present Situation of Depopulated Areas Development—Report of Depopulated Areas), Marui Kobunsha, Tokyo.
- Kokudochō (National Land Agency of Japan) (1981 b): *Kokudo Riyō Hakusho* (Annual Report on the National Land Use), Tokyo.
- Kishimoto, Minoru (1978): *Jinkō Idō Ron* (The Theory of Population Mobility), Ninomiya Shoten, Tokyo.
- Kōseishō Jinko Mondai Kenkyujo (Institute of Population Problems, Ministry of Health and Welfare) (1954): “Tenkanki Shomondai Ni Chokumen Su-Sengo Nihon No Jinkō Mondai” (Population Problems after WWII in Japan), *Research Series*, No. 90.
- Kuroda, Toshio (1970): “Jinkō Idō No Tenkan Kasetsu (The Hypothesis of Mobility Transition)”, *Jinkō Mondai Kenkyū*, No. 113, Institute of Population Problems, Ministry of Health and Welfare.
- Kuroda, Toshio (1978): “Jinkō Idō No Atarashii Tenkai (A New Development in Internal Migration)”, *Bulletin of Economic Science Institute*, College of Economics, Nihon University.
- Kuroda, Toshio (1979): *Nihon Jinko No Tenkan Kozo* (Demographic Transition Structure in Japan, revised edition), Kokin Shoin, Tokyo.
- Moderu TEIJŪ-KEN Kenkyu-kai (Research Committee for the Model Integrated Residence Area) (1982): *Asu No Chiiki Zukuri-Moderu TEIJYŪ-KEN No Subete* (Regional Building of Tomorrow—Handbook to Model Integrated Residence Area), co-edited by National Land Agency, Daiichi Hōki, Tokyo.
- Oda, Toshikatsu (1979): “Kokumin Keizai-Shakai No Henbō To Minamifurano-chō (Socio-Economic Change after WWII in Japan and Minamifurano-chō)” in Kiyohide Seki ed., *Hendō-ki ni Okeru Chiikishakai no Kadai to Tenbō* (Tasks and Prospects of local Community in Changing Era), Hokkaido Community Issues Committee, Sapporo.
- Oda, Toshikatsu (1980): “Tokachi-Chiikishakai To Ameniti (Tokachi-Community and Ameniti)” in Institute of Industry ed., *Tokutei chiiki wo Taishō To Suru Chiiki Kankyō-Keizai Sōgō Moderu No Kaihatsu Ni Kansuru Kenkyū* (A Study on development of the Comprehensive Model of Regional Environment and Economy), A Report of Hokkaido Regional Ecology Project, Institute of Industry, Tokyo.
- Otsuka, Tomomi (1981): “Sengo Nihon No Jinkō Idō Kenkyū No Dōkō (A Trend of Researches on Migration in Japan Since 1945)”, *Bulletin of Economic Science Institute*, College of Economics, Nihon University, Tokyo.
- Sōrifu Tōkei-Kyoku (Statistic Bureau, Prime Minister's office) (1982): *Wagakuni No Jinkō* (Population of Japan-1980 population Census of Japan, Abridged Report Series No. 1).
- Tachi, Minoru, Hidehiko Hama and Yōichi Okazaki (1970): *Mirai No Nihon Jinkō* (Future Population of Japan), Nihon Hōsō Kyōkai, Tokyo.
- Tsuru, Shigeo (1978): *Nihon Keizai No Kiseki wa Owatta* (The End of the Miracle of Japanese Economy), Mainichi Shinbun-Sha, Tokyo.
- United Nations (1979): World Population Trends and Prospects by Country, 1950-2000; *Summary report of the 1978 assessment*.
- Zelinsky, W. (1971): “The Hypothesis of the Mobility Transition”, *Geographical Review*, Vol. LXI, No. 2.

Summary

Japan has experienced drastic population changes in the thirty five years since the end of WWII. In this paper, the author describes the process, focusing on the change of population distribution pattern and the redistribution policy in respective periods. The most significant problem on population phenomena in contemporary Japan is the population redistribution movement named the mobility transition. The mobility transition shows that structural maintenance of a high density society has reached its limit. The Third National Development Plan was approved in 1977 against this background. In the Plan, the Integrated Residence Policy was selected as a new planning methodology to promote population redistribution. In order to realize the Policy, about 40 Model TEIJYŪ-KEN's were selected and various programs have been enforced since 1979. The success or failure of the Model TEIJYŪ-KEN programs can be said to be a key to the achievement of the redistribution policy.