CHAPTER 1

CHARACTERISTICS OF

DEMOGRAPHIC TRANSITION IN JAPAN

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1. Significance of Demographic Transition in Japan

Following World War II, Japan was the first country to successfully accomplish demographic transition. This demographic transition has a number of characteristics which are worthy of special mention.

Firstly, it was the first demographic transition to take place outside the Western cultural sphere. All of the previous demographic transitions had taken place in nations of Western culture, and because of this fact, during its initial years people viewed the remarkable postwar demographic transition in Japan with doubt -- a drastic reduction in the fertility and mortality rates in such a short period of time, something that had never been experienced by Western nations. There arose an active debate. On one side, people claimed that the statistics were deficient, and on the other that if the figures were in fact correct, then the transition was a miracle or a very rare case having characteristics unlike any other Western experience. This argument was the focal point of discussions in American academic circle during the 1960s. (*1)

Secondly, the Japanese case has international significance due to the fact that it was the first to take place in a non-European cultural environment. In particular, this raised a new question of whether a similar demographic transition could be expected to occur in the developing nations of Asia, which are also situated in a non-Western cultural sphere. Moreover, there are also certain questions as to whether the Japanese demographic transition, which occurred in a non-Western culture, could be explained as being substantially a "repeat" of the Western demographic transition. Although in the sense of demographic transition during the course of modernization, it may be understood as a "repeat" of the Western experience, in the strictest and most precise sense, it is not a mere "repeat" but one that was conditioned by the characteristics of Japan's modernization (*2). In other words, Japanese economic and social change, which served as the foundation for the transition in fertility rates, possessed characteristics conditioned by several factors such as historical, cultural and technological factors. Furthermore the period of the fertility decline, its speed and level were different from those experienced by Western nations.

Nevertheless, there exists a significant and valuable international importance in Japan's demographic transition.

The first reason lies in the fact that a phenomenon, which in the past had only been experienced in nations possessing Western culture, had occurred in Japan, a country in Asia located in the non-Western cultural region of the world. This fact suggests the possibility of demographic transition occurring in societies located outside the realm of Western culture.
The second reason is that through its own experience of demographic transition, Japan contributed both culturally and historically to bridging the gap between Western and non-Western societies. Japan has proved that the phenomenon of demographic transition occurring during the process of modernization, i.e. economic and social change, is not unique to Western culture, but a universal phenomenon.

The third reason is seen in the spread effects of Japanese demographic transition. It immediately spread south to Ryukyu (present Okinawa prefecture), which at that time was still under the military occupation of the U.S. Its fertility and mortality rates approached to the lower levels of Japan. Subsequently, the transition continued to spread to Hong Kong, Singapore, Taiwan and Korea. Those areas primarily belong to the Chinese cultural sphere, and the striking population phenomenon of Japan, belonging to the same cultural sphere served as the central model of diffusing this same phenomenon to other nations of the same cultural group. The author has referred to this as the demographic diffusion effect (*3). Such a diffusion of effects may differ according to the degree of similarity of society and culture, depth of historical and geographical relations, international exchange and the relationship fostered by the progress of such information facilities as transportation and communication, and the education level or rising expectations for improving the living standard. Today, the diffusion effects of demographic transition are beginning to appear not only in the areas possessing strong characteristics of the above Chinese cultural sphere, but also in other countries in Eastern South Asia, as well as in India and Sri Lanka in Middle South Asia.

In this respect, the low birth rate of approximately 20 or lower demonstrated by Barbados, Cuba, Puerto Rico and Uruguay in recent years may be viewed as the diffusion effects of low fertility seen in the U.S. in particular and Europe.

Demographic Transition in Japan and in Asian Nations

Briefly, the Japanese demographic transition can be said to have followed the European pattern. The level of the birth rate prior to the start of a declining birth rate was around 35, a level comparable to that of Europe. Moreover, Japan and Europe shared another common factor of lacking a population policy addressing the reduction of the birth rate. As is the same in the Western World, demographic behavior, which brought about the decline of birth rate in Japan, possessed almost every demographic response. They include late marriages, use of contraceptive devices, abortion and sterility. The only exception to this is permanent celibacy (*4). In Japan, the percentage of those people never getting married for their entire life was extremely small, and the percentage currently married was
CHAPTER 2

RURAL-URBAN DIFFERENTIAL IN
FERTILITY AND ITS NARROWING PROCESS

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1. Introduction

According to "Demographic Transition Theory" which explained the major change in population in modern Western society, it was thought that the fertility transition, namely the transition from traditional high fertility to modern low fertility would not occur uniformly in each and all of the social strata, but rather, the change would be first seen in a certain strata and eventually diffuse itself to the other stratas (*1).

In other words, it was believed that the small family norm (i.e. a view which believes that it is preferable to have a smaller number of children) and an effective way to restrain birth would, at first, penetrate into the urban middle class before spreading gradually into lower urban classes and into the rural society and thus, although the rural fertility should, at first, greatly exceed that of the urban areas, such a fertility difference would eventually diminish itself as the transition progresses. Such a way of view is represented by a so-called "diffusion hypothesis" concerning the fertility transition.

However, separate from such an idea, there have been other views proposed by some, which maintain that there also existed an effective way to control the fertility of a couple in the rural society prior to the transition, and such birth control was actually practiced at appropriate times and thus the concept of fertility control and its practice are nothing particularly innovative. Also, cases have been presented which indicate that not only the rural-urban differential in fertility were omnipresent during the pre-transitional period, but also the transition occurred simultaneously in both rural and urban areas (e.g. Sweden) (*2).

However, in recent years, new studies have been made public. They report that the family limitation, in other words, a behavioral pattern whereby a couple controls the birth in accordance with the number of their children, is inherent in the post transition period and thus cannot be seen in the pre-transition period (*3). To illustrate, they say that although there may have been both conscious and unconscious practice of birth control in the pre-transitional period, it was in the nature of either a temporary means to respond to emergency situations such as famine or adjustment of birth intervals by extending the period of lactation, and thus there is nothing which indicates that couples practiced birth control with an ultimate goal of limiting the number of children (family size). In other words, they claim that prior to the transition period, the births followed the pattern of "natural fertility" in principle. This view does not necessarily serve as evidence for "diffusion hypothesis." Nevertheless, supposing that innovative behavioral pattern (in this case, family limitation) is generally accepted by the urban community before being accepted by the rural community, then this may be pointed to as one circumstantial evidence.
In the past, discussion concerning "diffusion hypothesis" had evolved mainly in relationship to the fertility transition in Europe. However, it is worthy to review this aspect with regards to Japan, which is virtually the only country amongst the non-European world that accomplished the demographic transition.

Accordingly, this chapter will discuss the historical trend of the fertility differential between the urban and rural areas of Japan. Also, it is necessary that the discussion should not be limited to the superficial observation of the changes in the difference, but should extend its thoughts to the reasons that caused such changes. It is believed that through such efforts, it will be possible to evaluate the applicability of the diffusion hypothesis to the course of fertility transition in Japan, and also to reveal the similarities and differences between European and Japanese experiences in fertility transition.

2. Fertility Transition in Japan

In Japan, after marking the highest level in the history of vital statistics in 1920, (36.2%), the crude birth rate (i.e. yearly number of births per population of 1,000) continued to decline slowly during the prewar period, and reached the level of 26.6% in 1939 (Fig. 1). After World War II, the country experienced a so-called baby boom for three years beginning 1947, and during this period the crude birth rate shifted around the level of 35%. However, with 1950 as a turning point, it suddenly shifted to show a declining trend, and in only eight subsequent years, the rate declined by as much as 48% to record 17.2% in 1957. Statistics indicate that the decline of fertility in the modern age which started in 1920 marked its overall ending after 40 years, and this 40 year period may be referred to as that of fertility transition in Japan.

In case of Japan, the nature of fertility transition was substantially different between the pre and post war periods. Namely, the decline of the birth rate prior to the War was gradual whilst on the contrary, that in the post war period was drastic.

The results of the study which used the decomposition method to make the comparative analysis of the declines of crude birth rates of the pre and post war periods revealed that, if the impact of the age composition change is to be ignored, approximately 70% of the fertility rate decline can be attributed to the drop of proportion marrying, while the remaining 30% to the drop of marital fertility during the period prior to the War. On the contrary, with respect to the post War days, 80% of the decline is attributable to the drop of marital fertility and 20% to the drop of proportion marrying (*4). In other words, the gradual decline of fertility rate observed during the period before the War was primarily effected by the drop of the
CHAPTER 3

PREFECTURAL AND URBAN-RURAL DIFFERENTIALS IN MORTALITY

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1. Introduction

In comparison with recent trends, the regional differences in mortality in Japan was still extremely conspicuous in the 1920's. Reliable data which may be used for regional comparisons of mortality in Japan are only available from 1920 onward. This Chapter will describe the outline of regional differences in mortality in Japan for the period from the 1920's to the present. The discussion will be based primarily on data given by prefectures. The index indicating overall mortality (non-age specific) will be employed for comparison more often than age-specific mortality rates.

With respect to mortality index indicating the overall level, it would be convenient to use the sex-age-standardized mortality rates. The level of such standardized mortality rates, however, does not, by itself, possess a particular realistic significance. Instead, this paper will use, mainly, values of the expectation of life at birth from the life table, since they are easier to understand. In order to avoid trouble in using this index caused by that this is usually given separately by sex, this paper will use the life expectancy at birth for both sexes combined which is the weighted average with the assumption of sex ratio at birth being 105 males per 100 females.

2. Regional Differences in Life Expectancy at Birth

(1) First Half of 1920's

According to the life table for 1921-25 (1), the life expectancy at birth for the whole of Japan during the first half of the 1920's was 42.62 years (male 42.06 years and female 43.20 years), shorter compared to recent years by 34 years. Also, according to the life tables by prefectures (2) compiled for the same 5-year period of 1921-1925, the life expectancy at birth showed wide variations from the longest of 48.29 years (Miyazaki) to the lowest of 36.60 years (Ishikawa) (3). The coefficient of variation was 6.19% thus indicating a dispersion much larger than 0.65% for 1980. The primary industry rate (proportion of workers engaged in primary industry) will be used in this paper as the index illustrating the degree of urbanization of each prefecture. The prefectural correlation between the primary industry rate and the life expectancy at birth is given in Figure 1.

The primary industry rate of prefectures excluding the 7 major prefectures of Tokyo, Kanagawa, Aichi, Kyoto, Osaka, Hyogo and Fukuoka showed a range of 49 to 75% which include prefectures with conspicuously different levels of life expectancy at birth. Therefore, if limited to this area, there is absolutely no correlation between the primary industry ratio and the life expectancy at birth.
CHAPTER 4

MIGRATION AND RURAL DEVELOPMENT

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Introduction

During the early Meiji period, when modernistic developments were begun in Japan, the majority of the population lived in rural areas. About 100 years later, at the present, the majority of the Japanese population lives in urban areas. Urbanization accompanying economic and social development is a phenomenon common in all nations, but in regards to Japan, it can be said that its progress was especially remarkable.

However, it was not until after World War II that urbanization had progressed especially rapidly; progress before the war was comparatively slow. Before the war, rural areas and the agricultural industry played an important part in the modernization and industrialization of the Japanese economy as the source of supply for population and labor force. As a result, the relative status of the agricultural population declined, however its absolute status was maintained by political measures. This is indicated, for example, in the fact that although the proportion of those employed in the primary industry to the total number of employed declined gradually, the actual number of those employed in the primary industry showed hardly any changes. It is also indicated in the fact that the bulk of migrants to the cities before the war were younger sons, while the eldest son remained in the rural areas.

It is thought that post-war migration and urbanization are both quantitatively and qualitatively different than those which occurred before the war. Economic development was well under way by around 1955, and within time, a remarkable concentration of capital, technology, and labor force occurred in cities, especially coastal industrial zones suited for heavy chemical industries, the leading industry at that time. The rapid increase of job opportunities induced migration from the rural regions, thus causing a mass migration to the cities. As a result, the actual number of those employed in the primary industry including agriculture had decreased, as opposed to the pre-war period. The number of those employed in the primary industry was about 1.6 million in 1955, but 10 years later (1965) that number was not more than 1.2 million, and finally about 6 million in 1980.

Needless to say, the conspicuous population decrease in rural areas and in the agricultural industry while accompanied by high economic growth, has had large effects. In comparison with the pre-war period, the living standards of the Japanese people has generally progressed or improved remarkably, especially in rural areas. The theme of this chapter is to analyze this process of improvement from the viewpoint of migration.
CHAPTER 5

POPULATION CHANGES AND DEVELOPMENT IN RURAL SOCIETY

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Introduction

The theme of this chapter is to clarify the problems of rural population changes and development. Here, we will describe and analyze the relationship between the progress of "aging of population" in rural areas, and changes in family or household structures by focusing on regional characteristics, and attempt to approach the given theme.

This is because descriptions and analysis from such viewpoints will clarify diversities of changes in the Japanese rural population and its immanent problems; at the same time, I cannot help but think that these descriptions and analysis hold "the resources" to establish development policies corresponding to those diversities of changes in the population.

1. Factors Concerning Analytical Viewpoints of Changes in the Rural Population

(1) Diversities in the Social Structure

There have been extremely varied arguments up until now regarding how to understand the social structure (The principle of human relationships immanent within a certain society), but it is thought that "the homogeneous society theory"(*1) expressed by Chie Nakane, has won many supporters. But recently, views opposing this theory have been expressed. Yoshihiko Amino states, "aren't we too familiar with the generally accepted idea that, the Japanese are a homogeneous people constituted from the same language and race. Even if we do use the same language and race. Even if we do use the same language, it would be a great mistake to think that communication between fellow Japanese would be smooth and easy. Also, even if the Japanese are a single race, aren't we the race which has one of the most varied facial features, which is mentioned quite often? People often say, I am of the southern stock because, I have large eyes and a dark complexion. But ordinarily we often speak of the facial features of the Japanese according to various stocks, such as the northern stock or Korean stock. I just mentioned that the idea that the Japanese are a homogeneous people is generally accepted. However, it could also be said that the fact that the Japanese are a complex or heterogeneous people may be steadily becoming a matter of common knowledge quite far reaching."(*2) Moreover, Amino states that the east-west differences of racial and social structures which are being observed today "could certainly be traced back to the middle ages."(*3) Then, he states, "it is rather natural to think that this difference is the difference of the social constitution of east and west"(*4) and that "It is not possible to understand this difference by viewpoint such as; which came first and which came later, or which is the essence and which is the modification, from the beginning. This is not such a simple
CHAPTER 6

RURAL-URBAN DEMOGRAPHIC BALANCE

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1. Preface

After the end of World War II, death rates world-wide lowered, population increased explosively, and less developed countries have consequently been confronted with various population related problems – particularly that of a concentration of population in capital-centered urban areas. This rapid increase of population in urban areas has caused numerous problems; for example, housing shortages, sewerage and water, and an insufficient supply of utilities necessary for our daily life. Most of the newly migrated population live in slums without proper living conditions and the slums are expanding day after day.

The United Nations has collected and analysed exact information on the transition and the fluctuating factors of population increase, and has also made a projection for the future of population increase. These publications may serve as basic materials in finding solutions to the various problems which have arisen since this explosive increase. (*1). Using these materials, we will analyze the problem of population increase and concentration in the urban areas of less-developed countries.

Figure 1 illustrates growth of the total population and of urban populations in the whole world, in more-developed countries (MDC), and in less-developed countries (LDC) from 1920 to 2000. We can see from the Figure, first, that population increase and concentration into urban areas of less-developed countries started after World War II. From 1920-1980, the world population more than doubled, from 1.9 billion to 4.4 billion, and 80% of this increase (2 billion) occurred in less-developed countries. Concurrently, the world urban population increased fivefold from 360 million to 1.8 billion. In 1920, 72% of the world urban population was that of the most developed countries, while the urban population of less-developed countries was only 100 million. After 1960 however, the urban population of less-developed countries increased rapidly. In the 1970's it surpassed the urban population of most developed countries, and in 1980 it hit 970 million, thus increasing tenfold within 60 years. However, the proportion of urban population in the less-developed countries only increased from 8.4% to 30.5%, since the total population of these countries also increased considerably. In comparison, the proportion of urban population in the more-developed countries has increased from 38.7% in 1920 (which is larger than the present ratio in less-developed countries), to 70.7% in 1980.

Second, it is forecasted that population increase and urban concentration in less-developed countries will be more accelerated from 1980 to 2000. The world population will increase by 1.9 billion in those 20 years and 95% of this increase will be that of the less-developed countries. At the same time, the world urban population will increase by 1.4 billion and 82% of this increase (1.15
billion), will also be that of the less-developed countries. This means that the urban population in less-developed countries will more than double from 970 million to 2.12 billion in those 20 years.

Japan is the only state in Asia, except city-states such as Hong Kong and Singapore, that has reached the last stage of population concentration in urban areas. If this process and its characteristics or the transition and characteristics of the rural-urban demographic balance in Japan are clarified, they will serve as important materials in considering population concentration in urban areas of less-developed countries, especially Asian nations. In this chapter, changes in the rural-urban demographic balance in Japan will be discussed.

2. Transition of the Rural-Urban Demographic Balance: Current Population Concentration into Cities

(1) Definitions of Rural and Urban Areas

It is necessary to consider the basic concept underlying the compilation of data on rural and urban areas before observing fluctuations in the population distribution of rural and urban areas. Attempts at giving a standardized definition of rural or urban areas common to states of the world have not been successful. Various and numerous definitions and classifications of rural and urban areas have been based on considerations of history, politics, culture, and administration of each society. However, in analysing long-term changes in the rural and urban areas of a state, the definitions of the rural and urban areas used in statistics of that state are employed. The following three are the most widely used definitions in Japanese statistics on rural and urban areas.

The first definition of urban and rural areas is that the urban area is a city area (shi-area in Japan) and the rural area is the other area such as town or village (machi and mura). Generally, the smallest self-governing bodies are classified as an urban area or rural area according to population size, population density, industrial activity, history, etc. Therefore, urban and rural populations are self-governing bodies grouped as shi-areas and rural areas, respectively. The problems which occur when this definition is used are: First, problems in chronological comparison since the urban and rural areas vary as to when a self-governing body of a town or village is municipalized; the second problem is that, when the municipal boundary is extended by annexation of towns and villages, a rural area is included around an urban area in the municipality.

The second definition is that the urban areas are densely inhabited districts (DID) and the rural areas are the other districts. To note, annexation of cities, towns and villages, which has been seen