Report on the Basic Survey of Population and Development in Southeast Asian Countries
— China —

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The Asian Population and Development Association

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THE ASIAN POPULATION AND DEVELOPMENT ASSOCIATION, 1988

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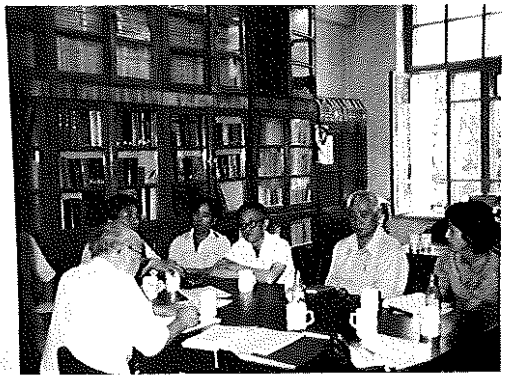
◀Explaining the outline of the survey to the Minister Wang Wei, of the State Family Planning Commission.

From left: Dr. Toshio Kuroda, Research Team Leader
The Minister Wang Wei
Ms. Yuiko Nishikawa, team member
Mr. Ding Xiaoming of the Foreign Affairs Division
Mr. Peng Zhiliang, Deputy Chief of the Office of Policy Research.

Discussing the survey details and activities of the family planning program at the State Family Planning Commission ▶

Mr. Xu Qingmei, Deputy Director of the Foreign Affairs Bureau, (third from right)
Ms. Wang Xiangying, Deputy Chief of the Foreign Affairs Division (second from right)

◀ Mr. Sun Muhan, Deputy Director, Jilin Provincial Family Planning Commission (third from right)
Mr. Chen Shengli, Deputy Chief (far right)
Ms. Wang Ping, Vice President, Jilin Provincial Family Planning Commission (fifth from left)
Mr. Hiroaki Washio, team member, (fourth from left)



Discussing the population survey at the Population Research Institute of Jilin University ▶

Prof. Zhu Riyao, Vice President of Jilin University (second from left)
Prof. Lin Yun, Vice President (third from left)
Dr. Wang Shengjin, Deputy Director, Population Research Institute (fifth from left)
Dr. Liu Yunde, Deputy Director, Population Research Institute (fourth from left)
Ms. Yasuko Hayase, visiting research fellow (far right)

◀ Jilin Provincial Family Planning Commission fact-finding session, on the topics of family planning activities, public hygiene and child and maternal welfare programs

Mr. Wang Zhiliang, Director, Jilin Municipal Family Planning Commission (center left)

Reporting the survey outline in Changchun ▶

Mr. Sang Fengwen, Deputy Secretary General, Changchun Municipal People's Government (second from left)
Ms. Li Huizhen, Deputy Mayor of Changchun City (third from right)
Mr. Yang Tianmin, Deputy Secretary General, Changchun Municipal People's Government (second from right)

◀ Visiting a home in Quangming, Jiannan, Jilin City (the two-storied house in the background)

Mr. Liu Zhixin, the head of the household and the staff of Jilin Municipal Family Planning Commission

Mr. Washio interviewing at the free market in Changchun City ▶

Foreword

This report presents the findings of a basic survey of population and development in the People's Republic of China. In 1987, the Asian Population and Development Association (APDA) was entrusted with the survey project, "Basic Survey of population and Development Problems in Southeast Asian Countries" by the Ministry of Health and Welfare and Japan International Corporation of Welfare Services. APDA selected China as the country in which its field survey would be conducted. The actual survey and analysis of the resultant findings were conducted by APDA's survey committee (Chairperson, Dr. Toshio Kuroda, Director Emeritus, Population Research Institute, Nihon University).

For effective application of population policies in the East Asia and other countries, population dynamics as population growth, diseases, mortality, reproduction, population distribution and internal migration, as well as static data of the population including family structure and population structure must be closely defined. In addition, effects of these factors on living and welfare standards, and medical care must be reviewed.

The objective of this survey was to contribute to resolving the problems related to population and development in Asian nations, by conducting a detailed survey of population dynamics, living and welfare standards and health and medical care and other aspects in the Southeast Asian countries.

The field survey was conducted with the guidance and cooperation of Mr. Wang Wei, Minister of State Family Planning Commission, Mr. Suguru Morimoto, Councilor of the Japanese Embassy in China and Mr. Shoji Ashikaga, First Secretary of the Japanese Embassy in China. Also, members of Jilin Provincial Family Planning Commission, Changchun Municipal People's Government, Population Research Institute of Jilin University and Jilin Municipal Family Planning Commission. In Japan, members of Policy Planning & Evaluation Division, Minister's Secretariat, Ministry of Welfare and Department of Policies, Economic Cooperation Bureau, Ministry of Foreign Affairs, cooperated in the planning and arrangements of the field survey. I would like to express my heart-felt gratitude to all of them.

In conclusion, I sincerely hope that this report would contribute to the further advancement of the population and development program in the People's Republic of China as well as the Japanese Government's effective cooperation with China.

Furthermore, I would like to add that this report is the responsibility of APDA and does not necessarily reflect the views nor policies of the Ministry of Health and Welfare or the Japanese Government.

February, 1988

Tatsuo Tanaka
Chairman
Asian Population and
Development Association

C O N T E N T S

INTRODUCTION:

IMPLICATIONS OF RAPID URBANIZATION IN CHINA

A new critical issue for the present China is population urbanization. The implementation of the new economic system featuring the contract responsibility system of farming households has brought about the increase in non-agricultural population. In October 1984, Chinese State Council published a very important circular on the movement of peasants to settle in towns, urging all levels of government to support peasants with special skills who are competent to do business in towns. This is based on the Documents No.1 issued by the central committee of the Chinese Communist Party in January 1984 which permitted peasants in certain regions to move to towns to work or conduct business, be registered as non-permanent or permanent residents. As a result, mass migration took place in China. The emergence of new cities and the population increase in small- and medium-size cities have raised the proportion of overall urban population. The urban population accounted for mere 17.9 percent in 1978, but rapidly increased to 23.5 percent in 1983, 31.9 percent in 1984, and reached 36.6 percent in 1985 (Refer to Chapter 3, Section 4.). Furthermore, due attention must be paid to the massive inflow of unregistered population into large cities. A large number of workers are needed for civil engineering projects and construction of houses, factories, and hotels in large cities. Since migration into large cities is strictly restricted, unregistered temporary workers have inevitably to be recruited from rural villages. This is another factor contributing to the increase of urban population. At the same time, due to the increasing number of rural residents with urban life experience has increased and also diversification of the rural economy, rural population has become more urbanized in terms of economic activities and way of living. Such rapid progress in urbanization has not only expanded urban population but also decreased the number of rural farming households. It was suggested that there are some 24.8 million specialized households, which are about 14 percent of its total number of peasant households in the countryside (Note 1). Previously, farming households were organized under the collective farming system in which every member of the household is engaged in agricultural work. In today's rural towns and villages, however, besides full-time farmers, the number of farming households where members are engaged in business other than farming has increased rapidly. This represents a major change and can be said to be a social revolution in China. Similarly, in urban areas, it has become possible to own an independently-managed private business in individual households.

This new economic system has quickly boosted nation's living standards. It has not only modernized urban residents' life style but also spread new types of housing and promoted a modern life style among rural residents. While people's living standards have dramatically improved it must be noted that their value system has also changed. The impact that the improved living standards has on the value system placed on children and work ethics will be a crucial issue for the future economic and social planning in China.

It is a universal phenomenon that a huge economic and social gap is observed between urban and rural areas in the modernization process. Rural population is still an overwhelming majority in China. However, it is noteworthy that, due to the increase in non-agricultural population and the modernization resulting from the improved living standards, the rural population in China has increasingly assumed urban characteristics. In other words, the rural population has virtually become more highly urbanized than statistical data show. Therefore, it is suggested that social, cultural, and economic gaps and other differences between rural and urban areas have been narrowed.

Regarding the value system placed on children, the Chinese now favor a small family norm, and the proportion of parents who have been granted a one-child certificate is extremely high in urban areas. With the progress of urbanization in rural areas described above, people would be more inclined to control fertility. The tremendous improvement of living standards in rural areas will cause rural population to place greater expectation on their children who are given higher education. Parents will no longer consider their children as a means of production, seek cultural enlightenment for themselves, and expect cultural improvement of their society. Consequently, such a trend will help penetrate the norm of having small families in rural areas as well. This can be considered as an increased similarity in value system between rural and urban populations.

As far as economic development is concerned, rural and urban gaps have shrunk rapidly. In fact, the life style in rural areas has been greatly modernized. Nevertheless, judging from the information we obtained through direct interview with administrative officers and citizens in Changchun and Jilin, substantial regional gaps still exist in various social aspects, especially in the area of public health. In large cities, for instance, modern hospitals are being built and existing medical facilities are being expanded. In addition, complete and well-organized welfare policies are being implemented. There are some indications of disparity between central urban districts and suburban farming districts within the same city. For instance, infant mortality rate in the urban district is as low as 16 per thousand of live births, which is comparable to that in modern advanced nations, while infant mortality rate in rural district is twice as high (See Chapter 6). We did not have a chance to probe into the reasons for this difference. It seemed to us that there were some problems to which we shoud pay close attention in the area of public health and social welfare administration. Based on the fact that there is a substantial difference between the infant mortality rate in urban districts and that in farming districts even within the same municipal boundary, it can be assumed that the infant mortality rate in purely rural areas outside the city limits should be much higher.

The Chinese government considers the improvement of population

quality to be a significant part of its population policy, and has already achieved a remarkably low mortality rate. Therefore, the next important task is to lower the infant mortality rate and take preventive measures suitable for different causes of deaths.

The population urbanization currently taking place in China is a social phenomenon widely observed not only in urban areas but also in rural areas. The population urbanization has also brought about new social and economic impact on the Chinese society through the diversification of family or household structure and the change in value system.

Note:

(1) Ye Shunzan: Urban Policies as Urban Housing Programs in China, p.307 (Urbanization and Urban Policies in Pasific Asia, edited by R.J. Fuchs, Gavin W. Jones, and Ernesto M. Pernia, Westview Press, 1987).

CHAPTER 2:

CHINA - OVERVIEW

1. Land and People

Natural Conditions

China is 9.6 million square kilometers in area, 25 times the size of Japan. Therefore, geographical features, climate, and existing resources, which have great influence on people's living and economic activities, differ widely from one region to another. Climatically, China covers a wide range of zones: from subtropical monsoon climate in Hainantao and Kuantang Provinces in the south to subarctic weather in Heilungchiamg and Jilin Provinces in the north. There is a vastitude of humid climate in the central and southern regions while dry climate prevails in areas such as the Gobi and Takla Makan Deserts. Of the total national land area, 46% is suitable for agriculture, forestry, or livestock farming, but 53% is dry and barren land, with lakes and rivers accounting for the remaining 1%.

Topographical features include the Tibet Plateau in the western parts of Sichuan and Yunnan Provinces, which is developed on the scale of the grand Himalaya Mountains; the Tarim Basin; and beyond the Tienshang Mountains great rivers, such as the Hwang Ho and Yangtze-Kiang, stream out. East of the 2,000-4,000 meter plateau in Sichuan and Yunnan Provinces is a vast plain covering north, central, and south China where people are engaged in agriculture, adapting to the monsoon climate in the regions. The northeastern region above Beijing is comprised of two areas: Inner Mongolia extending from the Mongolian Plateau and the vast northeastern plain, the former land of Manchukuo. As indicated by the length of the two longest rivers in China, Hwang Ho's 5,464 kilometers and Yangtze-Kiang's 6,300 kilometers, China's land resources are huge beyond the scale of the imagination.

People

The Chinese population reached 1.5 billion in 1985, nine times that of the Japanese. The population density in China is 109 per one square kilometer, one-third the density of Japan. Of the total population 93% are of the Hang race, and 7% minorities of 56 different races, such as the Zhuangzu, Huizu, and Miaozu. Of these minorities, there are 15 races with a population topping one million: Zhuangzu, Huizu, Weiwuerzu, Yizu, Miaozu, Manzu, Zangzu, Mengguzu, Tujiazu, Buyizu, Chaoxianzu (Korean), Dongzu, Yaozu, Baizu, and Hanizu. The largest race is Zhuangzu with a population of 13.4 million. Major provinces and districts where these minorities live are listed in Table 2-2. The majority of the minority races live in such remote areas as Inner Mongolia, Sinkiang, and Yunnan. In addition, areas where minorities are concentrated are given autonomy as self-governing districts, provinces, or prefectures, and the Chinese Government respects their political autonomy.

Languages and Religions

The predominant language used in China is Chinese based on the language used by the Hang race representing the majority. However, each minority race mentioned above has its own language. Furthermore, the Chinese language itself is widely diversified, i.e., Mandarin, Cantonese, and Fuchien. These Chinese dialects are widely divergent and differences are much greater than those of Japanese dialects. However, Chinese characters, used mainly by the Hang race throughout its long history, are commonly used in all the dialects as ideography. Since the establishment of the People's Republic of China, the Chinese Government has changed Chinese characters into simpler forms and made a concerted effort to diffuse the standard dialect, chiefly Mandarin, in accordance with policy aimed at eliminating illiteracy and furthering education. Specifically, the 1982 population census revealed that the illiteracy or semi-illiteracy rate of the population over 12 years old was still as high as 23.6%. Although raising the education level has made substantial progress under the Socialist government, there are still various problems to be solved.

China is a multi-religion country. Buddhism, Taoism, Islam, Christianity, and many other pagan religions with ethnical backgrounds are practiced. Since the establishment of the People's Republic of China, religions and religious faith were considered detrimental from a socialistic point of view. However, Article 36 of the present Constitution established in 1982 provides for religious freedom. It prohibits national and social organizations from attempting to force people to believe or not to believe, and forbids discrimination based on religious persuasions. Nevertheless, due to nearly 30 years of oppression, religious activities in China are generally not vigorous except for those practiced by some minorities.

2. Economy and Economic Policies

The Chinese economy and economic policies have changed greatly since the Third National People's Congress in the 11th Term, held in December 1978. The 1980s have noted overall economic development. The main features being to: (1) maintain a semblance of the socialistic economic system as an economic foundation on one hand; (2) allow some degree of autonomy for corporate activities; (3) introduce foreign capital by establishing special economic zones, and (4) acquire foreign technology in order to effect technological improvements. By adopting those aggressive policies, the Chinese Government has endeavored to achieve balanced development among agriculture, light and heavy industries and improve economic efficiency with resultant improvements in the standard of living. The Sixth Five-Year Plan (1981-1985) was carried out, and China achieved rapid economic growth: GNP showed a 10% annual increase on average, industrial production increased by 12%, and

agricultural production improved by 8% (Table 2-3).

The Seventh Five-Year Plan (1986-1990) implemented in 1986 set three basic economic goals: (1) fortify the socialistic economic system of China by maintaining a balanced supply-demand situation in society; (2) maintain consistently stable economic development; and (3) improve people's standards of living. Rapid economic growth during the Sixth Five-Year Plan brought about shortages in energy and materials while improvements in product quality and economic efficiency lagged behind quantitative expansion. Learning from this difficult experience, the Seventh Five-Year Plan is designed to control growth at a slower rate (average GNP growth rate is expected to be 7.5%) and emphasizes quality rather than quantity in production. Moreover, reformation of the economic system is one of the most significant objectives of the Seventh Five-Year Plan. The Plan introduces changes in the economic system to (1) scale down on "orders" issued by the central government to medium and large enterprises, and instead provide them with "guidance." This in turn would encourage enterprises to become relatively independent economic entities. (2) Relax distribution control of goods and supplies and expand market mechanisms to stimulate development of socialistic commodity markets; and (3) reverse governmental control of the corporations from direct to indirect, thus establishing a new socialistic, macroeconomical control system.

Under these plans, the Chinese economy has been making rapid progress in the 1980s under the provisions cited above. In Beijing and other major cities, a construction boom is noted and living standards are improving steadily. For instance, per capita national income increased from 374 yuan in 1980 to 646 in 1985, and will increase to 840 yuan in 1990 if economic development progresses as planned. The industrial infrastructure including roads, electric power plants, and communications systems, has also shown rapid improvement. However, it should be pointed out that over and under population exists in China: some coastal cities are extremely overpopulated while massive stretches remain empty. In order to cope, led by the Government, China needs to carry out efficient economic policies based on improvements in the socio-economic infrastructure. It needs to facilitate well-organized industrial activities utilizing "economies of scale" in primary industries on the one hand, and stimulate free and diverse industrial activities by encouraging people's creative energy on the other. It should be kept in mind that earning differentials and regional differences tend to expand when the national economy makes rapid progress. Before these differentials evolve into social problems, a new system to deal with problems should be carried out. Due attention must be paid to future economic trends in China. It will be worth noting how the new Chinese economic policies will achieve well-balanced social and economic development.

Table 1 Comparison of Major Indices of China and Japan (1985)

	China (A)	Japan (B)	Ratio A:B
Area of National Land (10,000 square kilometer)	960	38	25.3
Population (100 million)	10.5	1.2	8.8
Population density (per square kilometer)	109	323	0.34
Annual population growth (%, Average 1981-84)	1.2	0.7	-
National income per capita	646 yuan (US$220)	2.61 million yen (US$10,954)	0.02
Employed persons by industry (%)*	100	100	
Agriculture	69	4	
Manufacturing	13	22	
Other	18	74	

Note *: As of 1984
Source: China Statistical Yearbook 1986, International Financial Statistics, etc.

Table 2 Geographic Distribution of Minority Nationalities

Nationality	Main geographic distribution
Mongolian	Inner Mongolia, Liaoning, Xinjiang, Jilin, Heilongjiang, Qinghai, Hebei, Henan, Gansu and Yunnan
Hui	Ningxia, Gansu, Henan, Xinjiang, Qinghai, Yunnan, Hebei, Shandong, Anhui, Liaoning, Beijing, Inner Mongolia, Heilongjiang, Tianjin, Jilin and Shaanxi
Tibetan	Tibet, Sichuan, Qinghai, Gansu and Yunnan
Uygur	Xinjiang and Hunan
Miao	Guizhou, Yunnan, Hunan, Guangxi, Sichuan, Guangdong and Hubei
Yi	Sichuan, Yunnan, Guizhou and Guangxi
Zhuang	Guangxi, Yunnan, Guangdong and Guizhou
Buyi	Guizhou
Korean	Jilin, Heilongjiang, Liaoning and Inner Mongolia
Manchu	Liaoning, Heilongjiang, Jilin, Hebei, Beijing and Inner Mongolia
Dong	Guizhou, Hunan and Guangxi
Yao	Guangxi, Hunan, Yunnan, Guangdong and Guizhou
Bai	Yunnan and Hunan
Tujia	Hunan, Hubei, Sichuan and Guizhou
Hani	Yunnan
Kazak	Xinjiang and Gansu
Dai	Yunnan
Li	Guangdong
Lisu	Yunnan and Sichuan
Va	Yunnan
She	Fujian, Zhejiang, Jiangxi and Guangdong
Gaoshan	Taiwan and Fujian
Lahu	Yunnan
Shui	Guizhou and Guangxi
Dongxiang	Gansu and Xinjiang
Naxi	Yunnan and Sichuan

Nationality	Main geographic distribution
Jingpo	Yunnan
Kirgiz	Xinjiang
Tu	Qinghai and Gansu
Daur	Inner Mongolia, Heilongjiang and Xinjiang
Mulam	Guangxi
Qiang	Sichuan
Blang	Yunnan
Salar	Qinghai and Gansu
Maonan	Guangxi
Gelo	Guizhou and Guangxi
Xibe	Xinjiang, Liaoning and Jilin
Achang	Yunnan
Pumi	Yunnan
Tajik	Xinjiang
Nu	Yunnan
Ozbek	Xinjiang
Russian	Xinjiang
Ewenki	Inner Mongolia and Heilongjiang
Benglong	Yunnan
Baoan	Gansu
Yugu	Gansu
Jing	Guangxi
Tatar	Xinjiang
Dulong	Yunnan
Oroqen	Inner Mongolia and Heilongjiang
Hezhe	Heilongjiang
Moinba	Tibet
Lhoba	Tibet
Jino	Yunnan

Table 3 Results of 6th Five-Year Plan and Targets for 7th Five-Year Plan

Five-Year Plan	6th Five-Year Plan			7th Five-Year Plan	
	1980 Actual	1985 Actual	1981-85 Average Growth (%)	1990 Targets	1980-90 Average Growth (%)
National Income (100 million yuan)	3,688	6,765	9.7	9,350	6.7
Gross National Products (GNP) (100 million yuan)	4,193	7,780	10.0	11,170	7.5
National Income per capita (yuan)	374	646	11.6	840	5.4
Gross Industrial and Agricultural Production (100 million yuan)	7,195	12,137	11.0	16,770	6.7
Gross Agricultural Production (100 million yuan)	1,964	2,903	8.1	3,530	4.0
Food Production (10 thousand ton)	32,055	37,898	3.4	42,500 or 45,000	2.3 or 3.5
Gross Industrial Production (100 million yuan)	5,231	9,234	12.0	13,240	7.5
Production, Light Industry (100 million yuan)	2,460	4,611	13.4	6,610	7.5
Production, Heavy Industry (100 million yuan)	2,771	4,623	10.8	6,630	7.5
Energy Supply Output (standard coal, 10 thousand ton)	63,720	83,900	5.7	99,100	3.4

Five-Year Plan	6th Five-Year Plan			7th Five-Year Plan	
	1980 Actual	1985 Actual	1981-85 Average Growth (%)	1990 Targets	1980-90 Average Growth (%)
Social Capital Investment (100 million yuan)	n.a	2,475	17.6	2,970	3.7
Government Revenue (100 million yuan)	1,085	1,854	11.3	2,567	6.7
Government Expenditure (100 million yuan)	1,213	1,826	8.5	2,567	7.1
Export (100 million dollars)	182.7	258	7.1	380	8.1
Import (100 million dollars)	195.5	334	11.3	450	6.1
Number of Craftsman (at the end of year 10 thousand)	10,444	12,270	3.3	14,120	2.8
Total, craftsmen's wage (100 million yuan)	773	1,355	11.9	1,900	7.0
End of Year Population (10 thousand)	98,705	104,639	1.2	111,300	1.24

Note 1. National income and GNP in current prices. Gross industrial and agricultural production in constant prices of 1980.

2. Industrial production in the rural area is excluded from the agricultural production and included in the industrial production.

Source: People's Republic of China 7th Five-Year Plan for Economic and Social Development 1986-1990 Jinmin Shuppansha, 1986.

CHAPTER 3:

CHINA'S POPULATION

1. Characteristics of Population Increase

According to statistics released by the State Statistical Bureau in China, the total population in China reached 1,060.08 million, approximately 4.5 times larger than the U.S. population and nine times greater than Japan's. Without doubt, China is the most populous country in the world. However, it should be noted that the dramatic increase in China's population occurred in just thirty years following Liberation.

It is estimated that China's population remained around 50 to 60 million until the mid-seventeenth century, and the population continued to increase at a relatively slow pace even in modern times. (Note 1) A national census was carried out in 1912 which revealed that China's total population was 449.64 million. For 37 years between the census and the Liberation, China's population increased by only 122.02 million. The average annual increase rate was a mere 0.78 percent, which was extremely low compared to the average annual growth of 2.67 percent for thirty years after the Liberation. It can be said that China's population before the Liberation was in the preliminary stage of demographic transition; that is, a period of slow population increase with large fluctuations in high fertility and mortality.

The rapid demographic transition after the Liberation and the population increase associated with it were characterized by two periods of rapid population increase and subsequent rapid decline in growth rate. The first rapid increase was noted for eight years after the establishment of the People's Republic of China in 1957. China's population in 1949 registered 541.67 million, and increased by 15 million each year for an annual growth rate of more than two percent. This was mainly due to a decline in the mortality rate. This period is the so-called early stage of demographic transition. (Table 1 and Figure 1)

The second stage of population increase lasted 12 years from 1962 through 1973 during which the total population increased 200 million and finally reached 900 million. This was due to a baby boom which was perpetrated by a reactional rise in birthrate after a drastic decline stemming from the failure of the Great Leap Forward compounded by a great famine. This is also due to the fact that the death rate showed a steep decline while maintaining a high birth rate. The rapid increasing rate, constantly above 2.5%, continued for almost ten years, and population pressure became a great deterrent to economic and social development in China.

Throughout the 1970's, the rate of population increase substantially dropped: the increasing rate of 2.6 percent in 1970 was cut almost by half in seven years. The increasing rate has currently remained around 1.2 percent. The birth rate also declined to a level equal to advanced nations. It seems that as in Taiwan and South Korea,

demographic transition has reached its final stage in China. (Note 2)

It is well-known that the Chinese Government plans to restrain China's total population at the 1.2 billion level by the year 2000. Let's examine whether this policy goal is attainable. According to an estimate calculated by the Beijing Review, the annual increasing rate should be maintained around 0.95 percent in order to maintain a total population of less than 1.2 billion. (Note 3) Furthermore, taking into consideration that the generations born during the past two periods of rapid population increase will marry and have children toward the end of this century (population momentum), it would be very difficult to maintain a 1.2 billion level. The population trend in China is still unpredictable.

2. Decline in Death Rate

It is estimated that before the Liberation, China had a very high death rate of 28 per million. However, the death rate started falling in the middle of the 1940s and recorded 20 per mill around the time of Liberation. It further declined drastically to 10.8 per mill in 1957. Except for the period of economic turmoil and the great famine from 1959 to 1969, the death rate continued to decline gradually to a range between 7 and 8 per mill. Currently, the death rate in China is stabilizing around 6 per mill.

It has been confirmed that age specific death rates have dropped in all age groups, and especially the drop in death rate of infants under age 2 is noteworthy. According to an estimate by the Health Department of the Chinese Government, the infant mortality rate, which was 200 per mill in the Liberation period (Note 4), decreased below 40 per mill in 1985.

This decline in the mortality rate will naturally influence an increase in life expectancy at birth. Life expectancy at birth was 35 years in 1949 and, since then, almost doubled reaching 69 years in 1984. This life expectancy level is almost equal to that of South Korea, and exceeds developing nations' average life expectancy of 57 years by more than 10 years. Based on the fact that China's GNP is still a mere $310 per capita, it can be readily seen that an epoch-making decline in mortality rate can occur without a precondition of economic development.

In fact, this decline in mortality rate is largely attributable to aggressive activities by the Chinese Government in the field of health and sanitation. Otherwise, China could have never reduced the mortality rate successfully in such a short period of time. For instance, immediately after the revolution, the Chinese Government set major policy goals in this regard, including improvements in sanitary conditions, vermin extermination, preventive vaccination against

communicable diseases, and production increases in medical and pharmaceutical products. In addition, the health and medical policies during the Great Leap Forward and Cultural Revolution successfully diffused medical services to local levels. At the same time, it is said there are about 1.4 million "barefoot doctors (Chijiao Yisheng)" (1981 statistics). It should not be overlooked that they played a significant role in improving sanitary conditions and promoting people's health in rural areas. On the one hand, Chinese generally have a comprehensive understanding on health issues, and have been using traditional herb medicines daily since ancient times. Some point out that such concern about health, coupled with expansion of health and medical services by the Government, accelerated demographic improvement (Note 5). Nevertheless, there remain many problems which need to be solved in the future, e.g., unequal distribution of medical services in rural areas; regional differences in mortality rates between rural and urban areas; and delays in introduction of therapeutic drugs compared with preventive medicine.

3. Fertility Changes

Figure 2 shows the changes in the total fertility rate in China by urban, rural, and all regions, which is an index of fertility excluding changes in age composition. The most prominent changes indicated in this figure are two temporary drops in the fertility rate and a steep continuous decline which began in 1970. The first dramatic decline was recorded in four years from 1958 through 1961. The average births of one female dropped from 6 to 3. In this period, life was severely threatened by such drastic social and political movements as the Great Leap Forward and the Cultural Revolution. The reactional rise in birth rate over the next several years can be understood as a catch-up phenomenon in which people who had been suffering from social disorder and poverty tried to recover fertility. Such a reactional movement was especially eminent in rural areas.

The second substantial decline in birth rate was seen around 1967, which coincides with the onset of the Cultural Revolution. (Note 6) This social turmoil which victimized the elite had great impact especially in urban areas. Reflecting this, the total fertility rate in urban area reached its lowest level. As such, changes in Chinese fertility have been deeply related to political and economic changes.

In addition to the above temporary declines, the fertility rates started to show steady decline in the 1970's. The fertility rate already started to decline in the 1960's in urban areas when the Family Planning Program was introduced. However, the decline in the fertility rate in rural areas where 80% of the total population live did not start until the middle of 1970's when the population policy started to be carried out nationwide. Since then, however, the overall fertility rate

has shown drastic decline: from 5.8 per mill in 1970 to 2.2 per mill in 1980, and is being maintained at a low level. This is a remarkable change, almost equal to the Japanese experience after World War II in which the fertility rate was cut to half in only ten years. Needless to say, the background of this great achievement is the positive and strong policy of the Family Planning Program carried out by the Chinese Government. Especially, this remarkable record was achieved by an earnest effort to expand the family planning network and aggressively promote education in the rural areas where people had a traditional belief of "many children, more happiness" and their educational level was relatively low.

The penetration of the Family Planning Program can be observed in the changes in the age-specific fertility rate. As shown in Table 2, the fertility rate declined in every age group, and showed an especially steep decline in ages 14-19 and 30-44. In other words, encouragement of later marriage resulted in a decline of births by teens, and childbearing has been confined to the age group above 30 by widespread use of contraception and promotion of a low birth control campaign. Consequently, birth pattern of Chinese women underwent drastic change in the 1970's, and their childbearing ages tend to be concentrated in the twenties.

In 1986, however, the specific fertility rate reactionally increased from 2.0 in the previous year to 2.4. This seems to reflect the relaxation in population control policy since 1984. Attention should be paid to whether the fertility rate will remain at the current level or rise in the future.

4. Urbanization and Urban Population Distribution

The demographic urbanization caused by population transfer from rural to urban areas is an inevitable trend which stemmed from industrial development. However, demographic urbanization in China has been significantly slower than advanced nations, and of developing nations as well because the Chinese Government prevented expansion of the urban population by strict controls on family registration and other restrictive measures. However, as to the urban population composition, large cities have a substantially great share, and it is vital for China to reorganize its unbalanced urban population.

For 10 years after the Liberation, China's urbanization made steady progress. The industrialization policy aiming at recovery of the national economy accelerated the population shift from rural area to cities and rapidly increased the urban population. The urban population, which was 57.65 million in 1949, increased to 99.49 million by 1957, and urban population ratio to total population changed from 10.6 to 15.4 percent. After the revolution, the economic advancement by

the Great Leap Forward further absorbed rural population into urban areas, and pushed urban population up to 130.73 million in 1960, 19.7% of the total. However, economic growth achieved by the Great Leap Forward did not last long. Consequently, more than 20 million people were forced to return to their rural villages.

The urban population ratio was maintained at a 17-18 percent level for as long as 17 years from 1962 through 1978. During this period, urban population increased by 6,186 million to 17,245 million, but this increase is mostly attributable to a natural increase. The reason the demographic urbanization made little progress in this period was that the national economy remained stagnant and immigration from rural areas was strictly controlled by the family registration system. Especially the "Family Registration Act" issued in 1958 was a rigid regulation which did not allow rural residents from moving to cities, with few exceptions such as entrance to universities and employment by governmental organizations. Moreover, even if the head of the house got a job in a city, his family was not allowed to move with him, and thus, "separation" became a serious social problem.

In 1978, the Third Conference of the Central Committee of the Communist Party of China introduced the farming household output quota system in which the Government awarded individuals farming contracts without changing the basic rule of national ownership of the land. This policy measure accelerated dissolution of communes, prompting labor surpluses in rural areas and resulted in another demographic urbanization. The urban population ratio, which was 17.9 percent in 1978, increased to 20.2 percent in 1981, and 23.5 percent in 1983. (Note 7) The total urban population reached 241.26 million in 1983. In contrast, such rapid urbanization did not provide sufficient employment opportunities and brought about many problems in urban areas, such as housing shortages, traffic congestion and environmental destruction.

Therefore, a very important problem in terms of national development will be what distribution ratio the urban population will have, which is expected to increase continuously in the future. This is because the urban population in China has an already uneven growth pattern and steady population increases have been seen only in such large cities as Beijing and Shanghai. As shown in Table 3, only 13 large cities account for 21.8 percent of the total urban population while the total population of 103 cities with less than 0.3 million population accounted for a mere 9.3 percent of the total urban population.

Taking this phenomenon into account, the Chinese Government implemented the following guidelines in an effort to deter further expansion of uneven distributions of urban population (Note 8): restrictive control of population increase in large cities (population more than one million); reasonable development of medium-sized cities

(population between 0.2 to 1.0 million) and aggressive development of small cities (population less than 0.2 million). In particular a policy has been carried out to transfer excess labor in rural areas to small- and medium-size cities and "Zhen (village)" close to the farming communities, and let them work at "town/village" corporations.

Notes:

(1) Duan Jixian "Transition and Outlook for the Chinese Population," Asian Population in the Transition Period, Jicho-sha, 1986.

(2) Toshio Kuroda, "Demographic Dimensions in the Asian Pacific Region and Japan," IDC Forum, 1987.

(3) Vol 28, No. 44, November 1985.

(4) The World Bank estimates that China's infant mortality rate was higher than this figure.

(5) China: The Health Sector, the World Bank Country Study, WB, 1984.

(6) Lee-Jay Cho, Population Dynamics and Policy in the People's Republic of China, 1984, p. 119.

(7) It was announced that the urban population ratio thereafter was 31.9 percent in 1984 and 36.6 percent in 1985. This rapid growth, however, is mainly attributable to changes in administrative boundaries and establishment of new cities and towns. Thus, it should not be directly compared to data of preceding years. The World Bank estimates that the rate of demographic urbanization in China is 25 percent.

(8) Zhao Yanqing, China's Urbanization Process, Paper presented at the International Population Seminar, Beijing, June 1987.

Table 1 Summary Measures of Vital Rates: China, 1980-1985

Year	Crude Birth Rate (‰)	Crude Death Rate (‰)	Rate of Natural Increase (‰)	Total Fertility Rate	Infant Mortality (‰)	Life Expectancy at Birth
1950-1955	36.4	14.9	21.6	6.2	130	40.6
1955-1960	28.2	14.8	13.3	5.3	160	34.5
1960-1965	35.1	11.1	24.0	5.8	115	44.1
1965-1970	34.4	8.2	26.2	5.9	91	52.1
1970-1975	27.2	7.3	19.9	4.5	66	59.1
1975-1980	18.6	6.6	12.0	2.8	49	64.5
1980-1985	19.2	6.7	12.5	2.2	38	

Source: China Statistical Yearbook 1986 and UN World Population Prospects 198_

Table 2 Age-Specific Fertility Rates: China, 1970, 1980

Age Group	1970	1980	1970-80 Change (%)
15-19	44.4	11.6	-73.9
20-24	283.2	141.6	-50.0
25-29	312.2	189.6	-39.3
30-34	253.0	64.2	-74.6
35-39	178.2	27.2	-84.7
40-44	82.4	10.8	-86.9
45-49	9.0	2.6	-71.1
TFR	5.8	2.2	

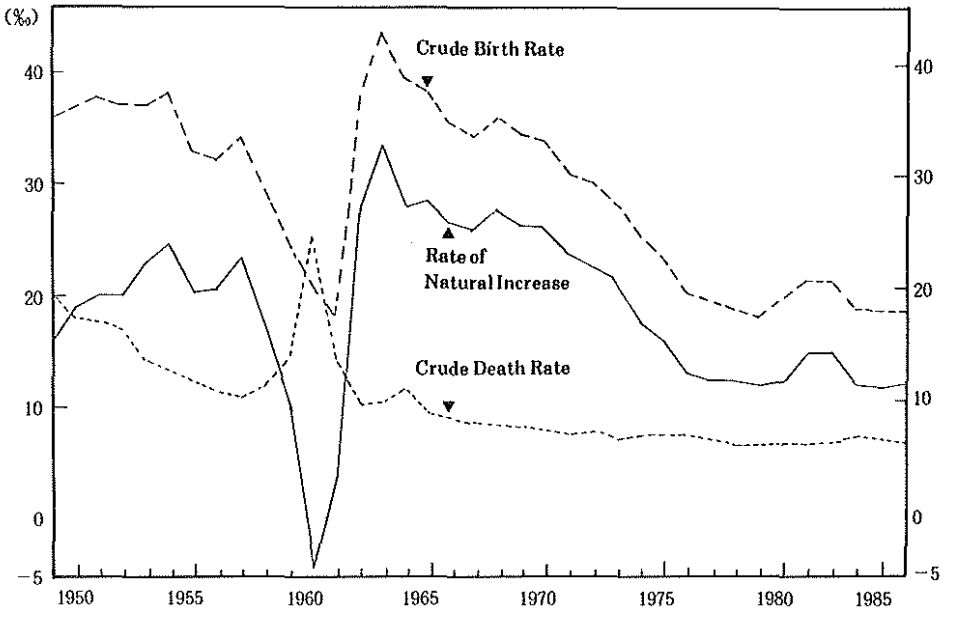
Source: Aggregated from Analysis of 1/1000 Sampling Survey of China (1983)

Table 3 Number of Cities and Urban Population by Size of City: China, 1985

Size of City	Number of City	Urban Population
2 million or more	13 (4.0)	4,620 (21.8)
1000000-1999999	44 (13.6)	5,484 (25.9)
500000- 999999	85 (26.2)	6,061 (28.6)
300000- 499999	78 (24.1)	3,040 (14.4)
100000- 299999	93 (28.7)	1,929 (9.1)
100000 or less than	11 (3.4)	53 (0.3)
Total	324 (100)	21,187 (100)

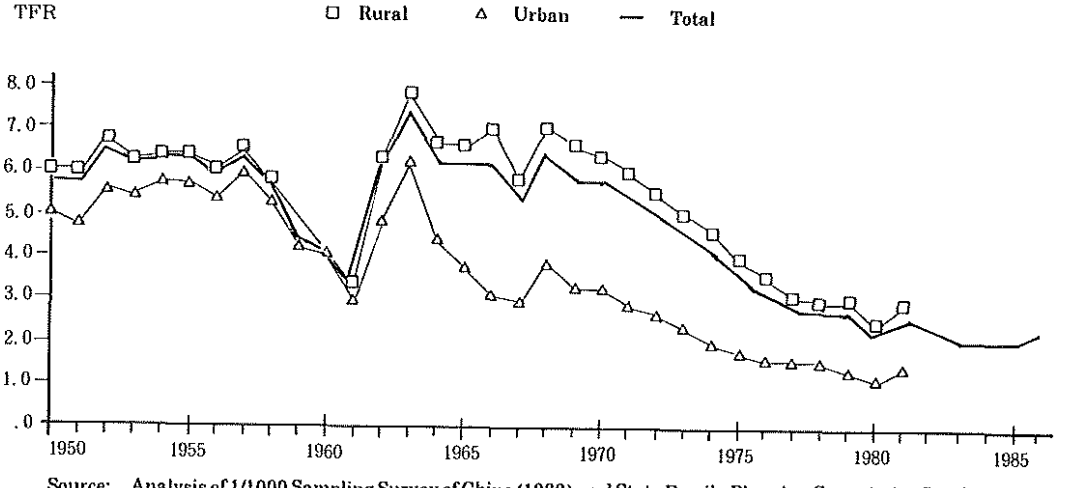
Source: 1986 Statistical Yearbook of China, State Statistical Bureau, Beijing

Figure 1: Birth, Death and Natural Increase Rates: China, 1946~1985



Source: Drafted from data in China Statistical Yearbook, 1986

Figure 2: Total Fertility Rates: China, 1950~1986



Source: Analysis of 1/1000 Sampling Survey of China (1983), and State Family Planning Commission Brochure

CHAPTER 4:

FAMILY PLANNING PROGRAM

1. Historical Background

On the streets of towns and villages in China, such signs as "Family Planning (Planned Birth)" and "Have no more than one child" will catch people's eye. Today, China's "one-child policy" is well-known as part of a patriotic movement, but the Chinese Government's stance toward population problems was not necessarily consistent.

It was right after the Liberation, when the Malthusian theory was simply rejected by Chairman Mao. The idea that population growth is a sign of prosperity of socialism, which was well described by the slogan "the larger the population, the better the society," was accepted by an overwhelming majority. However, as the national census conducted in 1953 revealed that annual population growth was more than two percent, they began to recognize gradually that an unplanned population increase could become a deterrent to economic development. Therefore, Zhou Enlai first advocated the necessity of child and maternal welfare and birth control in his "Proposals for the Second Five-Year Plan." Yet, this drastic change in political position only brought about bitter disputes among political leaders and scholars, and did not produce any practical policy measures. Rather, during the subsequent Mao's Great Leap Forward movement, demand for construction workers increased and, again, optimistic population theories swept over China. During the same period, economist Ma Yinchu, who called for aggressive population control, was removed from office as President of Beijing University.

It was in the 1960s when the family planning program in China was established systematically. The Central Committee of the Chinese Communist Party and the State Council issued the "Direction for the Serious Advocation of Family Planning" in 1962, and it was designed to approve planned population control as a conditional policy in their socialistic society. They called for the introduction of birth control in urban as well as some rural areas, which were extremely overpopulated. In 1964, the Birth Planning Office was instituted in the State Council, and affiliate organizations on a local level were established in some of the provinces and cities.

As described in the previous chapter, in accordance with the promotion of the family planning movement, the birth rate of urban population started to decline in the 1960's. Nevertheless, the family planning movement was interrupted once again by the Cultural Revolution, which started in 1966. It was in the early 1970s when a systematic and effective family planning program, which continues till today, was originally introduced. Chairman Mao Zedong proposed a slogan in the Fourth Five-Year Plan in 1971: "One child is satisfactory, two are acceptable, but three are too many." The nationwide enforcement of population control was adopted at that time. The State Family Planning Commission consisting of members of the State Council and the National Science Academy was established in 1973. At the same time, the Family

Planning Promotion Office was reorganized as the Family Planning Guidance Office so as to improve administration. Furthermore, a campaign for "Later marriage, longer birth intervals, and less children" was repeated pertinaciously, and contraceptives started to be distributed free. Due to these positive efforts, rural population finally started to decline for the first time.

When the administration leaned to the right after the downfall of the Gang of Four, China's family planning program was changed into a more extensive and consistent one and the objectives of the policy became more specific and clearler. Behind such vigorous promotion, there was serious concern by the Government about the population momentum of the first baby boom generation. In 1978, the "one child is best, two is maximum" policy was adopted, and it was decided to include the promotion of the family planning program in the Constitution. Thus, the family planning program came to be recognized as a national task. In 1979 the well-known "one-child policy" was adopted, and this made China's population program internationally famous. This "one-child policy" is an epoch-making attempt aimed at zero population growth at the end of this century by developing intensive programs to encourage couples to have only one child, based on the concept of "later marriage, later birth, less children, and eugenic protection."

As such, China's family planning policy had been strengthened and enforced for more than two decades. In 1984, to be noted, the tight population policy was slightly relaxed for the first time. The relaxation is symbolized by the slogan "Open a hole slightly, cover a hole widely," which means to admit a few exempted cases while making the program permeate widely. This policy permitted to have a second child in 16 limited cases, including a few previously exempted cases as well. As a result, the ratio of couples having a second child was about five percent, but has increased to 10-15 percent due to this newly adopted policy. (Note 2) On the other hand, this policy strictly prohibits unplanned births and offenders are subject to punishment. Therefore, this policy needs to be interpreted not as unconditional relaxation of the one-child policy but as a supportive measure to completely carry out a family planning program.

2. The Benefits of a One-Child Certificate

China's one-child policy has recorded remarkable success in a short period of time. This is largely owing to two major factors: social and economic benefits given to those who have accepted the population control policy, and the thorough and aggressive promotional activities by family planning administrative bodies. The former factor will be reviewed in detail in this section.

In China, couples who submit to sterlization after the birth of

their first child and couples who agree not to have any more children after their first child becomes four years old are entitled to receive a "one-child certificate." One-child certificates were first issued in Sichuwan province in 1979, and are currently obtained at the Family Planning Commission Office of any province or region in the country. By obtaining a certificate, a couple can enjoy favorable treatment offered by the government. Actual benefit packages differ by city, province, or even community, but some of the major benefits included are as follows:

(1) Bonus

If a couple are salaried workers, they can receive a five yuan bonus every month (the amount differs slightly by region) until their only child becomes 14 years old.

(2) Beneficial treatment in land distribution

If a couple are farmers, they will be provided with additional land which they can freely cultivate.

(3) Increased retirement benefits

(4) Housing priority

(5) Social Services Priority

Their only child will have priority entering a nursery, day-care center, or kindergarten, and also in receiving medical services in a hospital. Some provinces such as Sichuwan province, provide free medical services

(6) Employment Priority

An only child has priority in employment and admission into the armed forces. In some regions, such as rural area in Guangdong, couples with a single child are preferentially given non-agricultural jobs

However, if a couple have another child after they received the one-child certificate, they have to return all the above benefits. Moreover, some provinces will apply economic sanctions on those who have three or more children. For instance, in the city of Beijing, income will be reduced when the number of children increases. Furthermore, in Guangdong, Hunan, and some other provinces, they enforce even stricter measures such as eliminating all the children born after the second child from the recipient list for medical services.

3. Administrative Network

What connects the family planning program as a national policy with public coopertion is the administrative organization working on family planning, a network which expanded from the central government to the local level and to all work places. Under this complete network,

repeated public promotion and education have effectively promoted birth control.

In March 1981, the Family Planning Commission of the State Council was established as a central organization which plays a key role in promoting the family planning program. (Figure 1) This Commission has five bureaus, including eleven subordinate departments such as a Family Planning Promotion Office. The following are the major functions of the Family Planning Commission.

(1) To establish family planning policy and measures.
(2) To establish annual, medium- and long-term population policies.
(3) To conduct research and study the actual status of family planning in the country, and to provide guidance to local organizations.
(4) To enlighten people and plan promotional advertising with the assistance of other related organizations.
(5) To conduct scientific research on family planning, and to produce and distribute contraceptive devices and drugs.
(6) To plan and allocate the national budget for family planning.
(7) To create organizations to promote family planning, and to improve administrative efficiency and policy planning ability.
(8) To appeal for international cooperation in the field of family planning and population problems.

It should be noted, that the Family Planning Commission is a combined team consisting of representatives of many related agencies. Therefore, in some cases, agreement or coordination is effected by the Ministry of Public Health, Ministry of Civil Affairs, Ministry of Finance, the State Planning Commission, the Federation of Women, and so forth.

At the local level, each province, city, or self-governing district has, as a core organization, the family planning committee with its subordinate organizations. In urban areas, there are family planning aids at work sites and schools to help distribute contraceptives, provide consultation on family planning, and to persuade workers to obtain one-child certificates. In order to give guidance to housewives and retired workers, experts are assigned to a community committee. In contrast, there are Family Planning Promotion Offices at the local level and family planning guidance groups in villages of rural areas. These experts visit each household to disseminate knowledge on family planning, and their daily efforts together with promotion and education provided via TV, radio, and posters, have effectively promoted public participation in the family planning program.

4. Accomplishment of the Family Planning Program

The Chinese experience verified the fact that even in developing

nations with a relatively high proportion of agricultural population, the birth rate can be reduced in a short period of time through strong and positive promotion of family planning by the government. In this section, China's achievements in population control will be reviewed based on family planning statistics.

First, with regard to birth order of newborns, the cases in which a newborn was the couple's first child was slightly more than 20 percent in the early 1970's. In 1978, the rate exceeded 30 percent, and after the one-child policy was put into force, the figure showed an accelerated increase reaching 56.4 percent in 1983. (Table 1) On the other hand, newborns who were the third or fourth child amounted to more than 60 percent in the early 1970's, and rapidly declined to 17.3 percent in 1986, the lowest rate in history. Since 1984, the proportion of second children has shown a slight rebound, but that of a third or fourth child has obviously declined. This recent trend agrees with the adoptation of a new population policy of the Government, "Open a hole slightly, cover a hole widely."

The encouragement of later marriage was included in slogans for family planning as one of the effective birth control measures. The average age of women at the time of their first marriage gradually increased right after the Liberation of People's Republic. (Note 3) In 1974 when the "later marriage, longer intervals between births, less children" campaign started, the average first-marriage age was 23.4 years old in urban areas and 21 years old in rural areas, which is almost equivalent to the level of western countries. Along with the spread of the family planning program, the age at the first marriage reached to 24 years old in urban areas vs. 22 in rural areas in the early 80's while the difference between rural and urban areas remained. According to the Marriage Law, which was amended in September 1980, legal age for marriage is 20 for females and 22 for males, the highest level in the world.

Furthermore, contraceptive use continues to rise even in the 1980s, and increased from 64.4 percent in 1981 to 72.8 percent in 1986. Of popular contraceptive measures, the IUD has tended to decline, and instead, the ratio of tubal ligation has been gradually increasing. There are only a small number of people who depend on pills or condoms. It is noted that safer and more reliable methods are preferred by the Chinese.

Finally, it has been reported that more than 14 million couples received one-child certificates by 1982. Many of those couples are urban residents. Of all the couples in which the wife is in the reproductive age, those who have obtained one-child certificates were estimated at 15.2 percent in 1986.

Based on the above data, it can be said that China's family

planning movement has been accepted by the Chinese People swiftly as well as successfully. It can also be said from above statistics that the decline in birth rate in the 1970s was more attributable to the spread of contraceptive measures than a trend of later marriage.

5. International Cooperation

International cooperation in the field of population and family planning has been provided to China mainly through international organizations, such as UNFPA (United Nations Funds for Population Activities), WHO. And recently, cooperation on a bilateral basis, as well as by non-governmental organizations, has also been increasing.

(1) Cooperation through International Organizations

UNFPA (United Nations Funds for Population Activities)

China joined the UNFPA in 1979 and requested international cooperation in the field of population and family planning. In response to China's request, the UNFPA decided in June 1980 to provide China with $50 million for four years as the first part of an assistance program. This assistance program included cooperation on the population census conducted in 1982. In this program, emphasis is placed on introduction of innovative new technology and the most modern equipment ever used in China.

In June 1984, the UNFPA decided to provide China with another $50 million for five years starting 1985 as the second assistance phase. The purpose of this program is to generally improve the population and family planning program in China, and at the same time help the Chinese Government to become independent in the field of population problems. In addition to the preceding programs, collection and analysis of basic data, establishment of population and development plans, promotion and education, and evaluation of programs have been set as new goals (Table 2).

The actual execution of these programs is entrusted to such international organizations as the UN, FAO, UNESCO, and WHO. At the same time, on the Chinese side, the Family Planning Commission, Ministry of Public Health, Ministry of Education, and National Science Academy cooperate in a project coordinated by the Ministry of Foreign Economic Relations and Trade.

UNFPA's total expenditure for Chinese programs amounted to $62.845 million by 1985. Including the budget for the project to be carried out between 1986 and 1989, total financial assistance given to China for nine years is expected to reach $95.043 million (as of July 1986).

WHO (World Health Organization)

Major assistance provided China by WHO includes the training of health staff, and promotion of studies in the areas of health, sanitation and preventive medicine. This assistance has been extended through cooperation with the Ministry of Public Health. Research assistance has been given to the Shanghai Family Planning Institute as well as the Beijing Medical College, and cooperation has also been extended to a study on the effectiveness and safety of the IUD and pills, as well as research and development of contraceptive devices and drugs. A total of 89 Chinese scientists have been sent to various UN organizations as trainees. Total financial aid provided China by WHO has reached $1.9 million.

(2) Bilateral Cooperation

JICA (Japan International Cooperation Agency), Japan

China is the largest recipient of Japanese assistance. In the field of population and family planning, the JICA in 1982 made a first-time agreement with the National Family Planning Commission to provide assistance for five years. Major programs of cooperation include improvement of family planning promotion networks and statistics and evaluation of family planning measures, and education and training of necessary human resources in related fields. Thus far, 40 trainees have been accepted by Japan and equipment worth ¥869.03 million provided.

IDRC (International Development Research Center), Canada

Canada's IDRC decided to provide China with financial assistance totaling $338,200 between 1986 and 1990 for the purpose of improving statistics on population and family planning in new six regions in addition to areas where a pilot study was conducted in 1983. Also, in order to encourage studies on the relationship between China's population and economy, financial assistance of $219,000 was given to the Institute of Information and Control in Beijing and the Chinese University in Hong Kong.

In addition to the above bilateral assistances, the U.S. (Census Bureau), Denmark, Norway, U.K., and Finland have provided assistance to China, but their history of assistance is relatively short and the scale remains minimal.

(3) Cooperation by Non-Governmental Organizations

IPPF (International Planned Parenthood Federation)

The China Family Planning Association was established in 1980 to promote a family planning movement at the individual level. In the following year, the Association joined the International Planned Parenthood Federation, the largest international organization promoting family planning activities. IPPF's activities are mainly educating human resources and strengthening organizations, but in 1985 it also provided equipment to be used for promotional education. IPPF aided China $732,000 in 1986, and the budget for 1987 is $806,000.

Since 1984, the JOICFP (Japanese Organization for International Cooperation in Family Planning) has been carrying out the original project based on IPPF's financial assistance, which links activities for child and maternal health care and a parasite control with family planning in both Jiangsu and Shangdong provinces.

Besides the above organizations, the Population Council helps to evaluate the Family Planning Program and the PIACT (Program for the International Adaptation of Contraceptive Technology) cooperated in improving contraceptive devices and drugs, as well as in production expansion. Furthermore, the Rockefeller Foundation is developing human resources in the fields of medicine and biochemistry, and provides assistance to joint research in cooperation with Harvard University and the East-West Center of Hawaii University. Aid provided to China by these non-governmental organizations is still small in scale, but the number of projects has been gradually increasing. It is anticipated that China will be able to obtain more cooperation and assistance from various organizations.

Notes:

(1) Special consideration is extended when: an only son and an only daughter of employed workers or urban residents get married and already have one child; a farming couple have only one child and both busband and wife are of a minority; a second marriage is involved and the couple have only two children from their former marriages; and several other cases.

(2) Sun Muhan, "History of China's Family Planning Program," Northern District Women and Children Publishing Association, 1987.

(3) In 1950s, average age of first marriage is estimated to be 20.1 years old in the cities and 18.8 in the rural areas. The figures in 1960s were 22.1 and 19.4 years old respectively.

Table 1 Family Planning Statistics; China, 1981-1986

	1981	1982	1983	1984	1985	1986
TFR (Total Fertility Rate)	2.6	2.5	2.1	2.0	2.0	2.4
Birth order of newborns:						
1st parity (%)	43.6	51.6	56.4	55.5	50.2	51.2
2nd parity (%)	26.7	24.2	24.6	25.0	30.0	31.5
3rd and multi-parity (%)	29.7	24.2	19.0	19.5	19.8	17.3
Average age of first marriage (urban)	24.7	24.9	24.4	24.2	22.8*	-
(rural)	22.3	22.1	21.8	21.7		-
Practicing rate of family planning (%)	64.4	66.0	70.0	79.2	74.0	72.8
Contraceptive methods (%):						
IUD	51.2	50.3	41.0	39.9	40.0	40.3
Tubal Ligation	26.2	26.8	37.4	38.1	36.8	36.2
Vasectomy	10.1	10.1	12.9	12.6	11.9	11.6
Pill	7.5	7.6	5.1	5.3	6.3	6.4
Condom	2.8	3.0	2.1	2.4	3.2	3.7
Other	2.1	2.3	1.5	1.7	1.8	1.8

* National level

Source: State Family Planning Commission, and State Statistical Bureau

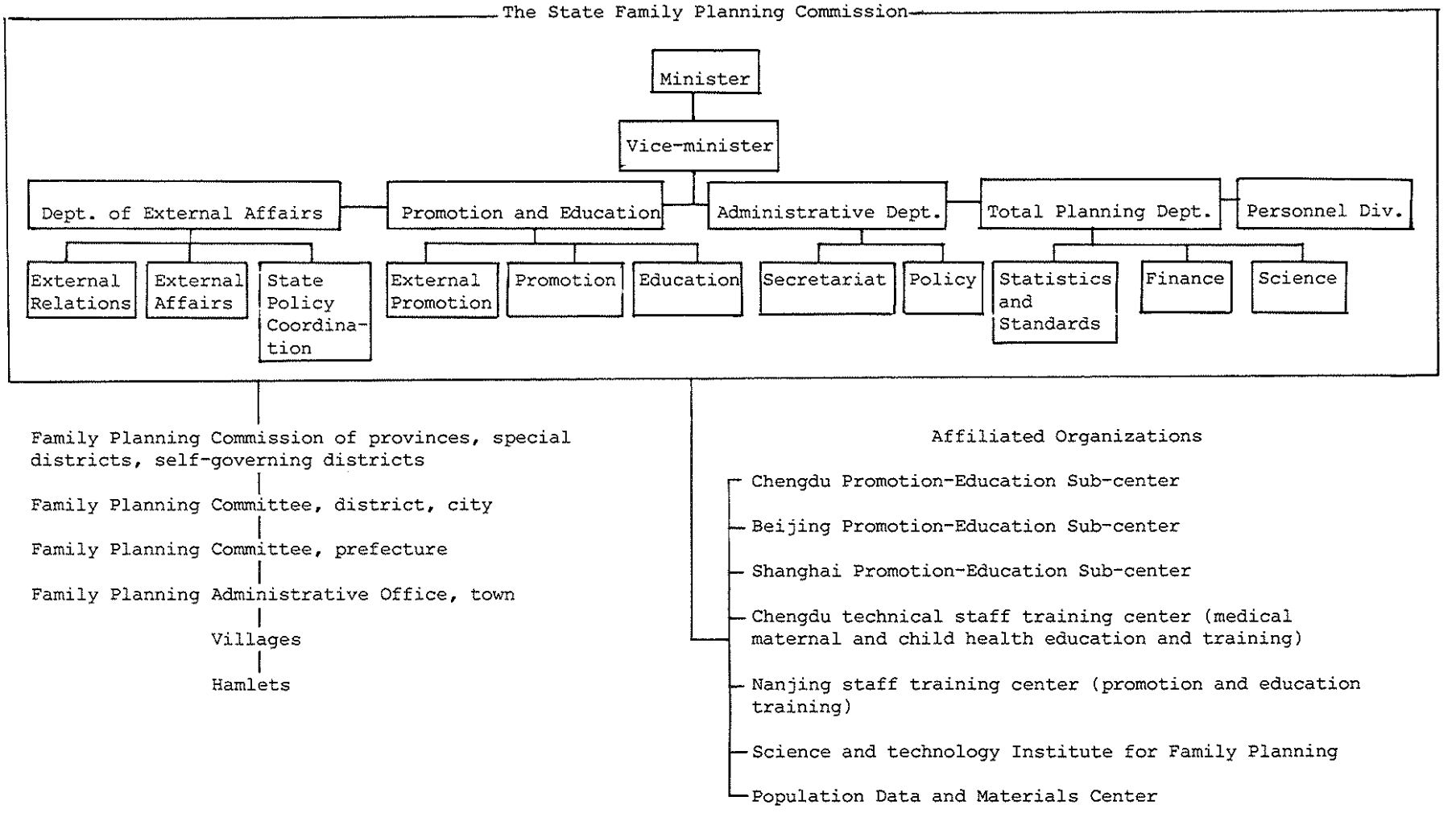
Table 2 Population-related Assistance Programs for China by UNFPA, 1980-1989*

Improvement of MCH/FP services	6
Strengthening of management function of MCH/FP activities	6
Strengthening of the function of FP related research institutes	3
Production and improvement of contraceptive devices and medicines	8
Promotion and education	14
Study and training about demographic statistics	9
Establishment and evaluation of programs	5
Other	3
Total	54

* Includes project planned to be carried out.

Source: UNFPA Inventory of Population Projects in Developing Countries around the World, 1985/86

Figure 1 Administrative Organization for the Family Planning Program in China



CHAPTER 5:

PUBLIC HEALTH AND MEDICAL CONDITIONS IN CHINA

There is not enough material available to judge the public health and medical conditions in China. Even without national-level data, however, it is possible to speculate on the present state to some extent, based on the data available at the province, city, and prefecture levels. These data is used in the following report.

1. Statistics on Death and Health-Medical Conditions

(1) Crude death rate (Note 1, 2)

The death rate per mill was 9.50 in 1965 and dropped to 6.57 in 1985. A 30 percent decline over 20 years. The death rate in urban areas is lower than the rural areas. The crude death rate in 1960 was extremely high as a result of a great famine. (Table 1)

(2) Infant mortality rate

Infant mortality rate, shown as the number of mortalities out of 1,000 live births, is an important indicator reflecting the health and sanitary conditions of a nation or region. China's infant mortality rate was extremely high: 200 before the Liberation and 138.5 in 1954. (Note 3) In 1981, however, the nationwide infant mortality rate declined to 34.68. (Note 3) Regional difference in infant mortality rate is eminent as shown by the fact that the average infant mortality rate in 1982 for 20 cities including Beijing was 13.0 whereas for 12 provinces and 49 prefectures including Shanghai, was 22.2. The figure for Jilin province was 9.88 in 1985. (Table 2) (Note 4) In addition, the infant mortality rate in Beijing, Shanghai, and Tianjing are lower. (Table 3) This contributes to the low rate in the urban areas. Improvements in rural areas are strongly desired.

(3) Neonatal mortality rate

This is the death rate of newborns within four weeks of birth. There are no nationwide data available, but based on the data of three cities, the neonatal mortality rate in 1957 seemed to equal that of Japan's in 1959 and 1967 (17.0-9.9). By 1985, the neonatal mortality rate in Japan dropped to 3.4 while that of the three sample cities was still twice as high as the Japanese rate. This high rate was recorded in urban areas. Thus, it is expected that the neonatal mortality rate in rural areas would be much higher (Table 3).

(4) Maternal mortality rate

Maternal mortality rate is an index to gauge the health level of expectant mothers, and is indicated as the number of mortalities per 10,000 births. On the national level, the maternal mortality rate was 150 before the Liberation, and has recently decreased to a mere 5. (Note

3) However, viewing the rates for the three cities in 1984 shown in Table 3, Beijing and Shanghai had rates less than 1. Tianjing remained higher at 2.4. Some cities had rates comparable to that of Japan (1.5), Canada (0.32), and New Zealand (0.58). The decline in maternal mortality rate is attributable to the decline in birth rate, increasing rate of deliveries at medical institutions, increased artificial abortions (research conducted in Jilin in 1982 indicated 38.13% of the married women had had abortions) (Note 4), improvements in sanitary conditions, and successful diffusion of child and maternal health care measures. It is also strongly related to the government's population control policy. Nevertheless, there are no data available on rural areas. Thus, it is premature to conclude that these figures indicate the overall national trend.

(5) Proportional mortality indicator (PMI)

PMI is the death ratio (%) in the age group 50 or older in proportion to the total number of mortalities. This rate can be calculated from the number of age-class specific deaths irrespective to the existence of deaths from unknown causes. Therefore, PMI is often used to evaluate sanitary conditions in developing countries. There are no data available for China as a whole, but PMI was obtained based on the number of age-class specific deaths in 1981 for 10 provinces. (Note 5) Japan's PMI was 88 in 1984 and, in general, advanced countries with greater proportion of the aged population usually show rates higher than 90. In Beijing and Shanghai, PMI was higher than 80, while there are also districts which have a PMI of less than 50 (Table 4). It is thought that areas with a high PMI should also have a high adult disease death rate.

(6) Stillbirth rate

Stillbirth includes both spontaneous fetal death and artificial abortion. However, there are no data available about spontaneous fetal death in China. A total of 101,029,422 cases of artificial abortion was reported for 14 years from 1971 through 1984. (Note 3) The number was 3,910,110 in 1971, gradually increased to reach a peak of 14,371,843 in 1983, then turned to decline to 8,890,140 in 1984. These changes seem to be closely related to the population policy of the Chinese Government.

(7) Life expectancy

Life expectancy in China showed a substantial increase from 1949 (35 years) to the 1970s. As shown in Table 5, female life expectancy reached 70 years in 1985. (Note 6) It was in 1960, that the life expectancy of Japanese women reached 70. Although there are still regional differences in towns (71.40), cities (70.87) and rural areas (67.17), China is aiming at extending life expectancy to 72 years by the

year 2000. (Note 4)

(8) Other health-related data

According to the 1984 data (Note 4), the rate of population urbanization, was 23.5%; illiteracy rate, 31.9%; population density, 108/km²; average number of people per household, 4.41; sex ratio in population, 106.9 (at the end of 1985) (Note 2).

2. Medical Facilities and Medical Staff

(1) Health and Medical Facilities

1) Medical facilities and staff

The number of public health organizations (hospitals, clinics, sanatoriums, public health control offices, and quarantine stations) has been steadily increasing since 1949. Accordingly, the number of people engaged in medical profession has been increasing. Table 6 shows the number of organizations by type of facility, number of beds, and number of medical staff in 1985. Table 7 classifies the medical workers and also shows actual figures and year-to-year comparisons in 1984 and 1985. Nurses aids and maternal aids have decreased, but all other workers have tended to increase. (Note 2) On the other hand, at the end of 1986, the number of hospitals and clinics was 2.3 million (3.2% increase compared to the preceding year), medical experts numbered 3.51 million (2.9% increase compared to the preceding year), of which 1.44 million (1.9% increase) were physicians and 681 thousands (6.9% increase) nurses (Note 7). There are slight differences between these statistics and data shown in Table 7. Table 8 shows data on sanatoriums for tuberculosis and the staff. (Note 8) There is no doubt that expansions and improvements in medical facilities have been made, the number of doctors has been increasing, and training and the reassignment of barefoot doctors promoted. (Note 1)

2) Medical education facilities

Many of the so-called barefoot doctors work in rural villages after they are trained and pass qualification tests. It was reported there were 400,000 barefoot doctors in 1982, and the medical services and activities in rural villages have been maintained by these village doctors. (Note 9) There are 134 higher-level medical schools of which classifications are shown in Table 9. (Note 9)

3) Social welfare facilities

There are 2.71 million handicaped people, senior citizens, and children who are under the protection of the community in rural villages. There are 21,000 endowment institutions in rural areas, which can accommodate 241,000 people. In urban areas, there are 1,200 social welfare facilities, and a total of 70,000 handicapped people, senior

citizens, and children are receiving social care at those facilities. The number of poor agricultural households which receive financial assistance is reported to be 2.43 million. (Note 4)

(2) Medical facility utilization

Table 10 and 11 indicate utilization status of medical facilities. (Note 2) According to a survey of rural area residents, which was conducted from May through November 1985 of 280,000 people in 10 self-governing districts, the average number of patients over a two-month period was 97 out of 1,000; frequency of seeing doctors was 2.6 times per patient; number of people who regularly go to a hospital was 32 people per 1,000; and the average number of days to go to a hospital was 0.5 day. Furthermore, of the home medical care provided by staff of a visiting medical service system, 490,000 beds were made available in 1984. Total number of patients who received medical services at home was 7.39 million. An average number of days for which they use beds was 44.2 days per bed. (Note 2)

3. Trends in Causes of Death

China's process for compiling mortality statistics by causes of death is unknown, but as far as the available data is concerned, there is a change in the top ten causes of death at the municipal and district levels. (Note 1 and 2)

(1) 10 major causes of death

The changes in seven major causes of death in 13 and 28 cities and prefectures between 1957 and 1984 are traced in Figure 1. Ten major causes of death in cities and prefectures in 1984 are shown in Table 12. There are some uncertain factors as to the method of recording diseases of the respiratory and digestive tract systems, but it is obvious that infections have decreased while adult diseases have increased. In addition, heart disease, diseases of the respiratory and digestive tract systems, tuberculosis, poisoning, and communicable diseases are more often seen in prefectures. Furthermore, with regard to the ten major causes of death by sex in cities and prefectures (Table 13) (Note 2), there is a little difference in order, but adult diseases generally rank high. The ratio of female tuberculosis patients is lower in cities while tuberculosis, communicable and neonatal diseases show higher proportions in cities.

(2) Trends in communicable and non-communicable diseases

Table 14 shows the outbreak rate of communicable diseases and the fatality trend. (Note 3) Improvement in the environmental health will prevent outbreak of some of the communicable diseases. Except for those listed here, there are reports about several other diseases. (Note 8)

a. Endemic diseases, including Keshan disease, Kashin-beck disease (1.76 million), and endemic goiter (13.90 million).
b. As parasitic disease, shistosomiasis, filariasis, and malaria are serious problems. There are 1,419,000 patients suffering from filariasis. By November 1985, however, filariasis had been eliminated in 660 prefectures out of 864 where filariasis spread. In 1983, blood testing of 5,667,000 people was conducted to reveal that 6,597 peole had malaria parasites (positive rate, 1.16%). Moreover, the blood tests of 10,315,000 patients who had high fevers showed a positive rate of 2.51% for malaria parasites.
c. There were 530,000 Kala-azar patients in 1952 but became none in 1980.
d. There were 27 cases of small pox reported in 1961, with no breakout reported since then.
e. The ratio of cerebrospinal meningitis peaked three times over the last 30 years, and is currently decreasing. However, no remarkable improvement has been made in terms of the death rate. (Table 2)
f. Tuberculosis is a chronic disease and many people die from tuberculosis even in advanced countries. Improvement has been noted in China, but there are large regional differences.
g. There were about 500,000 leprous patients in the early period of the Liberation, but the number is gradually decreasing. It is expected to be eradicated by the year 2000.

The above data indicate the disease structure in China. The morbidity rate of 15 acute infectious diseases, including viral hepatitis, diphtheria, pertussis (whooping cough) has dropped by 20 percent since 1983 (Note 2) and, in 1986, it declined as much as 40 percent compared to the preceding year. This improvement is largely attributable to preventive vaccination of 3 million people. (Note 7) It is expected that infectious diseases will decrease while the mortality rate due to chronic degenerative diseases such as adult diseases will increase. This will become a serious problem especially in urban areas. Epidemiological surveys in order to determine causes of diseases and preventive measures will be a significant future task.

4. Environmental Health

Data on environmental health is limited.

(1) City water

In 1981, 221 cities had water supplies and the rate of water supply availability was 85.2 percent with daily water consumption of 32,570,000 tons. (Note 8) The total length of water pipes in cities was 6,735 kilometers in 1985, and annual water consumption in urban areas was 12.8 billion tons (including 5.19 billion tons of domestic water). Population using water supplies was 942,430,000, and average per capita,

per day was 151.0 liters. (Note 2)

(2) Housing environment

Housing conditions for urban residents have been improving year after year. Comparing the average living space of houses per person between 1978 and 1985, there was an increase from 4.2 square meters to 6.7 square meters in urban areas and from 8.1 to 14.7 square meters in rural areas.

(3) Health projects in rural area

The following data are useful to describe conditions of establishment and management of an end organization in the medical and health field in rural areas.

a. Those organized by the village or entrusted to village doctors 50.93%
b. That jointly conducted by village doctors and public health staff 10.8%
c. That conducted by individuals 31.5%
d. That established by the Health Center 3.39%
e. Others 4.11%

About 87 percent of the total farming villages have some type of health organization. In addition, 40 percent of the medical staff in villages have acquired a qualification certificate as a village doctor.

Notes:

(1) China Statistical Yearbook, 1986
(2) China Almanac 1986
(3) China Health Yearbook 1985
(4) Second Basic Survey on Population and Family Planning in the People's Republic of China, pp.15-39, Japan International Cooperation Agency (JICA), March 1986
(5) Demographic Survey of 10% Extracted Samples in 1982, ed., by Demographic Statistic Division, the State Statistics Bureau, pp.446-465, Statistics Press in China.
(6) Further increase in life expectancy of China's population, China Population News Letter 3(4), 22, 1986.
(7) Hospital beds numbered 2,300,000, China Population News Letter 4(2), 14, 1987.
(8) Modern Public Health Operations in China, Part I, (Beijing: China Social Sicence Press), 1986
(9) Lu Zhen Fu, "China-Japan: Comparison of Medical Education", the Japan Medica Journal, No.3270, pp.46-49, 1986

Table 1 Crude Death Rate (per 1,000)

Year	Total	Urban	Rural
1949	20.00	-	-
1955	12.28	9.30	12.60
1960	25.43	13.77	28.58
1962	10.02	8.28	10.32
1965	9.50	5.69	10.06
1971	7.32	5.35	7.57
1975	7.32	5.39	7.59
1980	6.34	5.48	6.47
1985	6.57	5.96	6.66

Source: References No. 1 & 2

Table 2 Infant Mortality Rate (per 1,000 births)

Year	Cities	Prefectures
Before the Liberation	Around 200	
1954	138.5	
1958	50.8	89.1
1975	13.1	32.4
1980	13.0	23.9
1984	13.4	24.4

Source: Reference No. 3 & 4

Table 3 Changes In Infant Mortality Rate, Neonatal Mortality Rate, and the Mortality Rate of Pregnant Women in the Three Municipal Districts

(Beijing district)

Year	Infant mortality rate	Neonatal mortality rate	Pregnant women mortality rate
1952	65.7	35.9	-
1957	35.4	18.1	-
1962	21.7	11.3	-
1975	12.4	7.9	2.8
1980	10.4	7.1	1.3
1984	10.3	6.7	0.3

(Shanghai district)

Year	Infant mortality rate	Neonatal mortality rate	Pregnant women mortality rate
1952	37.7	-	18.6
1957	24.9	10.3	-
1962	20.7	9.0	1.1
1975	11.6	7.1	0.8
1980	10.8	6.8	1.1
1984	13.5	8.7	0.6

(Tianjin district)

Year	Infant mortality rate	Neonatal mortality rate	Pregnant women mortality rate
1952	46.8	-	-
1957	32.0	13.2	-
1962	21.1	11.4	-
1975	14.7	7.6	2.6
1980	10.8	7.5	1.3
1984	11.2	6.7	2.4

Source: Reference No. 3

Table 4 PMI in 10 Districts

District	PMI (%)	District	PMI (%)
Beijing	80.0	Henan	72.3
Tianjin	79.9	Guangtong	68.9
Liaoning	73.2	Guizhou	45.7
Shanghai	83.8	Gansu	60.1
Fujian	66.9	Ningxia	43.5

Source: Reference No. 5

Table 5 Average Life Expectancy at Birth (years)

Year	Total	Male	Female
1949	35	-	-
1973-1975	64.90	63.62	66.31
1981	67.88	66.43	69.35
1985	68.92	66.69	70.98

Source: Reference No. 6

Table 6 Medical Facilities, Beds, and Medical Staff

(1985)

Type of Facility	Number of facilities	Number of beds	Total staff	Medical experts	Other technical staff	Administrative staff	General staff
Total	200,866	248.7	431.3	341.1	4.6	35.9	4.7
1. Hospitals and clinics	59,514	222.9	299.9	236.3	0.8	24.9	37.9
1) Subtotal of number of hospitals at prefectural level or higher	11,497	148.7	205.3	154.6	0.7	17.6	32.4
General hospitals	8,748	111.5	156.0	118.8	0.5	12.8	23.9
Hospitals specialized in Chinese medicine	1,414	10.2	15.0	11.9	-	1.4	1.7
Medical school hospitals	173	8.1	14.3	10.3	0.1	1.3	2.7
Hospitals for epidemic	134	2.3	2.6	1.7	-	0.3	0.6
Mental hospitals	348	6.8	5.2	3.4	-	0.6	1.2
Sanatoriums for tuberculousis	117	2.8	2.7	1.7	-	0.3	0.6
Health posts for women and children	272	2.4	4.1	3.1	-	0.4	0.6
Childrens' hospitals	26	0.6	1.2	0.9	-	0.1	0.2
Hospitals for Hansen's disease	53	1.3	0.3	0.2	-	-	0.1
Hospitals for occupational diseases	36	0.4	0.4	0.3	-	0.1	0.1
Cancer hospitals	26	0.5	1.0	0.6	-	0.1	0.2
Other hospitals for a specific disease	150	1.7	2.5	1.7	0.1	0.2	0.5
2) Rural health centers	47,387	72.1	90.6	78.4	0.1	6.9	5.2

Table 6 Medical Facilities, Beds, and Medical Staff (2)

(1985)

Type of Facility	Number of facilities	Number of beds	Total staff	Medical experts	Other technical staff	Administrative staff	General staff
3) Other clinics	730	2.1	4.0	3.3	-	0.4	0.3
of which,							
Traditional Chinese medicinal clinics	41	0.1	0.1	0.1	-	-	-
2. Sanatoriums	640	10.6	5.1	2.5	0.1	0.8	1.6
3. Clinics for outpatients only	126,604	8.8	63.3	58.5	0.1	2.4	2.2
4. Quarantine station	1,566	3.0	4.7	3.5	0.2	0.6	0.6
of which,							
Tuberculousis preventive and medical treatment center	533	0.2	1.3	1.0	-	0.2	0.2
Medical treatment and preventive center for occupational diseases	99	0.2	0.5	0.4	-	0.1	0.1
5. Public health and quarantine stations	3,410	0.1	14.5	11.4	0.2	1.5	1.4
6. Women and child health centers	2,742	1.0	4.7	3.9	-	0.5	0.2
7. Medicine examination center	1,420	0	1.6	1.1	-	0.2	0.2
8. Medicine and science research organizations	323	0.4	3.3	2.0	0.4	0.4	0.6
9. Other health-related organizations	4,565	1.9	22.6	10.3	3.0	4.6	5.0
10. Privately-owned clinics	-	-	11.6	11.6	-	-	-

Source: Reference No. 2

Table 7 Number of Medical Staff Working at Medical Facilities

(unit: 10,000)

Job category	1985	1984	1985/1984
1. Total	431.3	421.4	102.3
Medical experts	341.1	334.4	102.0
Other technical staff	4.6	4.3	107.0
Administrative staff	35.9	34.1	105.3
General staff	49.7	48.6	102.3
2. Medical experts	341.1	334.4	102.0
Doctors of Chinese medicine	12.0	11.7	102.6
Doctors of Western medicine	60.2	59.7	100.8
Highly qualified doctors of the Chinese-Western combined medicine	0.2	0.2	100.0
Nurses	6.8	7.0	97.1
Pharmacists of Chinese medicines	1.4	1.4	100.0
Pharmacists of Western medicines	3.3	3.3	100.0
Quarantine experts	2.4	2.4	100.0
Other medical specialists	2.1	2.2	95.5
Medical practitioners in Chinese medicine	15.0	14.9	100.7
Medical practitioners in Western medicine	47.3	45.8	103.3
Nurse aides	56.9	54.6	104.2
Maternal aids	7.6	7.7	98.7
Pharmaceutical aids in Chinese medicine	5.5	5.3	103.8
Pharmaceutical aids in Western medicine	9.0	8.8	102.3
Quarantine aids	7.5	7.1	105.6
Other skilled aids	5.8	6.0	96.7
Other technical aids and medical practioners in Chinese medicine	6.6	5.8	113.8
Medical attendants	25.9	25.8	100.4
Pharmaceutical staff in Chinese medicine	8.2	8.1	101.2
Pharmaceutical staff in Western medicine	9.1	9.0	101.1
Quarantine staff	4.7	4.6	102.2
Other elementary medical assistants	43.6	43.0	101.4
3. Total number of medical experts per 10,000 population	3.26	3.24	100.6
of which: doctors and medical practioners	1.36	1.34	101.5

Source: Reference No. 2

Table 8 Hospitals, Beds, and Staff Specialized in Tuberculosis

	Number of hospitals	Number of tuberculosis preventive centers	Number of beds	Number of medical staff
1949	13	5	600	tens
1957	48	68	9,874	2,700
1960	75	131	22,835	6,000
1975	97	90	25,408	13,216
1979	111	289	27,308	19,730
1980	108	322	26,402	20,419
1981	110	376	27,474	22,966
1982	112	398	27,220	23,648

Source: Reference No. 8

Table 9 Medical Schools in China

Type	Number
Medical colleges	74
Medical colleges of Chinese medicine	28
Medical schools of universities	9
Pharmaceutical colleges	4
Medical professional schools	19
Total	134

All the above schools except for those for Chinese medicine are teaching Western medicine.

Source: Reference No. 9

Table 10 Total Number of Patients and Inpatients, 1985

Type of medical facilities	Total number of patients (10,000)	
	Total	Outpatients and emergency cases
Total	233,140	225,226
All hospitals and clinics at the prefecture and higher level	122,519	113,730
Health department	72,140	70,072
Industrial and other medical centers	43,132	36,551
Collectively managed facilities	7,247	7,107
Rural medical centers	110,034	106,049
Other clinics and medical facilities	5,587	5,447

Type of medical facilities	Total number of inpatients (10,000)	Number of patients hospitalized out of 100 patients	
		Total	Outpatients and emergency cases
Total	4,331	1.82	1.92
All hospitals and clinics at the prefecture and higher level	2,539	2.07	2.23
Health department	1,862	2.58	2.66
Industrial and other medical centers	611	1.42	1.67
Collectively managed facilities	66	0.91	0.93
Rural medical centers	1,771	1.61	1.67
Other clinics and medical facilities	21	0.38	0.39

Note: This table does not include 127,000 patients treated at medical facilities exclusively for outpatients and 887,000 patients treated at rural health centers.

Source: Reference No. 2

Table 11 Bed Using Situation in Prefectural and Other Hospitals

Year	Type of clinics	Average turn-overs (times)	Average number of bed-using days (days)	Bed occupancy rate (%)	Days of hospitali-zation per inpatients (days)
1975	Total	20.1	304.8	83.5	14.4
	Health Dept.	20.9	310.1	85.0	14.1
	Industrial and other medical facilities	15.5	276.6	75.8	16.6
1980	Total	20.7	302.0	82.5	14.0
	Health Dept.	22.1	313.6	85.7	13.7
	Industrial and other medical facilities	15.6	258.8	70.7	15.6
1984	Total	18.9	303.1	82.8	15.3
	Health Dept.	20.7	321.2	87.8	14.9
	Industrial and other medical facilities	14.6	253.1	69.2	16.3
	Collecting managed facilities	13.4	302.3	82.6	20.9
1985	Total	18.1	302.0	82.7	15.8
	Health Dept.	19.8	320.9	87.9	15.4
	Industrial and other medical facilities	14.2	253.6	69.5	16.5
	Collecting managed facilities	13.9	297.5	81.5	19.4

Source: Reference No. 2

Table 12 Top 10 Causes of Death: Cities and Prefectures

(Cities)

Top 10 causes of death / cities	Death rate per 100,000	Proportion to all the causes of death
1. Heart diseases	124.64	22.65
2. Cerebro vascular diseases	116.27	21.13
3. Cancer	116.18	21.11
4. Respiratory diseases	48.36	8.79
5. Digestive tract diseases	23.76	4.32
6. Traumatic injuries	19.36	3.52
7. Pulmonary tuberculosis	10.17	1.85
8. Poisoning	10.17	1.85
9. Urinary diseases	9.48	1.72
10. Infectious diseases	8.14	1.48

(Prefecture)

Top 10 cases of death	Death rate per 100,000	Proportion to all the causes of death	Japan (1985)
1. Heart diseases	168.75	24.57	117.3
2. Cerebro vascular diseases	104.83	15.31	112.2
3. Cancer	102.96	15.03	156.1
4. Respiratory diseases	83.31	12.16	-
5. Digestive tract diseases	38.62	5.64	-
6. Traumatic injuries	22.07	3.22	-
7. Pulmonary tuberculosis	28.51	4.16	3.7
8. Poisoning	29.29	4.28	-
9. Urinary diseases	-	-	-
10. Infectious diseases	16.26	2.37	-

(1984: Cities include all or part of the 28 municipal districts, including Beijing. Prefectures include 70 prefectures including Shanghai and some communes.)

Note: The above order of causes is based on the data in cities. The order for prefectures is different.

Source: Reference No. 3

Table 13 Top 10 Causes of Death by Sex in Cities and Prefectures

(Top 10 causes of death in cities)

	Male	Female
1.	Cancer	Heart diseases
2.	Heart diseases	Cerebro vascular diseases
3.	Cerebro vascular diseases	Cancer
4.	Respiratory diseases	Respiratory diseases
5.	Traumatic injuries	Digestive system diseases
6.	Digestive system diseases	Traumatic injuries
7.	Pulmonary tuberculosis	Poisoning
8.	Infectious diseases (excluding tuberculosis)	Urinal diseases
9.	Poisoning	Endocrinous diseases
10.	Urinal diseases	Pulmonary tuberculosis

(Top 10 causes of death in prefectures)

	Male	Female
1.	Heart diseases	Heart diseases
2.	Cancer	Cerebro vascular diseases
3.	Cerebro vascular diseases	Cancer
4.	Respiratory diseases	Respiratory diseases
5.	Digestive system diseases	Digestive system diseases
6.	Traumatic injuries	Poisoning
7.	Pulmonary tuberculosis	Pulmonary tuberculosis
8.	Poisoning	Traumatic injuries
9.	Infectious diseases (excluding tuberculosis)	Infectious diseases (excluding tuberculosis)
10.	Neonatal diseases	Neonatal diseases

(1985: The above data include 36 cities and 72 prefectures.)

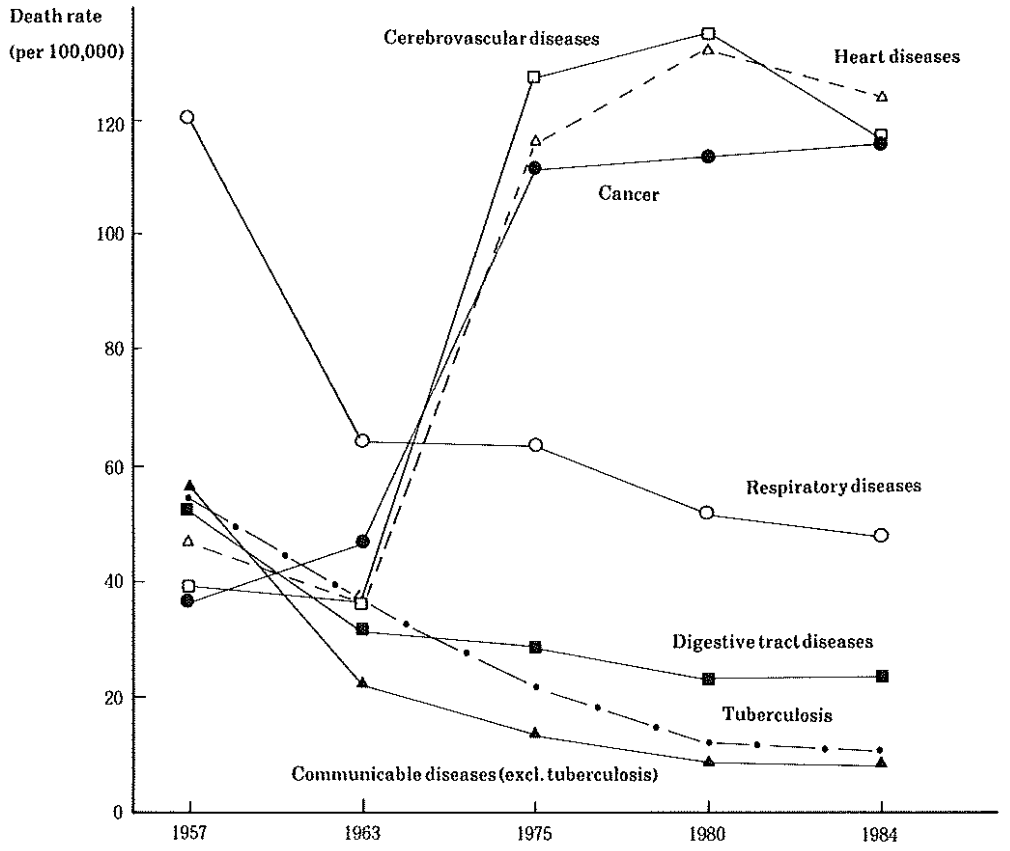
Source: Reference No. 2

Table 14 Onset Rate of Infectious Diseases and Their Death Rates in China, 1984

Diseases	Oncet rate (per 100,000)	Death rate (per 100,000)	Lethality (%)
Total	1,034.35	1.98	0.19
Plague	-	-	-
Paracholera	0.16	0.00	0.60
Diphtheria	0.33	0.04	10.88
Cerebrospinal meningitis	11.64	0.58	4.95
Pertassis	20.96	0.03	0.15
Scarlet fever	5.73	0.00	0.08
Measles	60.14	0.28	0.47
Influenza	380.21	0.02	0.01
Dysentery	374.96	0.21	0.05
Typhoid, Paratyphoid	9.70	0.02	0.25
Viral Hepatitis	67.55	0.20	0.29
Acute poliomyelitis	0.16	0.00	3.08
Encephalitis	2.55	0.23	9.01
Malaria	87.70	0.00	0.00
Kalaazar	0.01	0.00	2.65
Russian encephalitis	0.02	0.00	5.80
Tsutsugamushi disease	0.12	0.00	0.17
Hemorrhagic fever	8.82	0.28	3.22
Leptospirosis	3.60	0.07	2.01

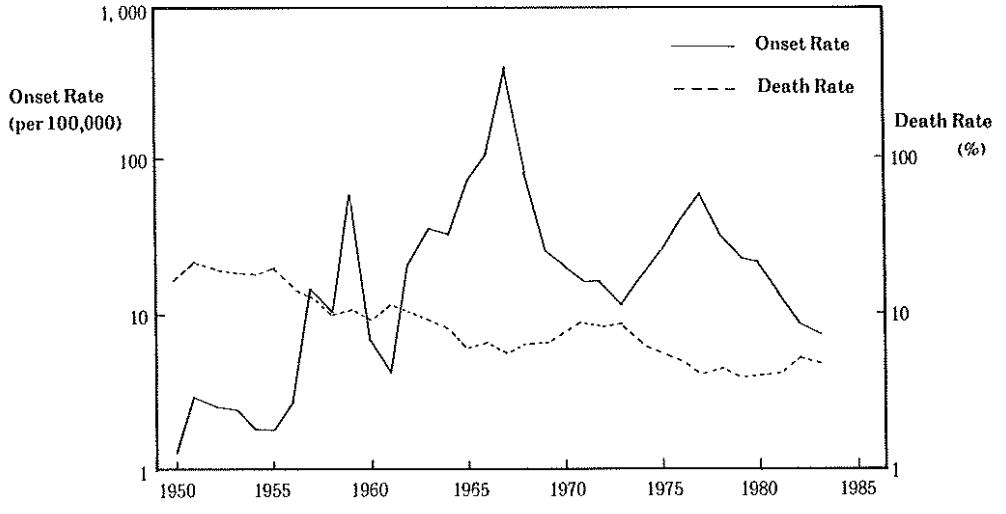
Source: Reference No. 3

Figure 1: Changes in Top Seven Causes of Death in Urban Area



Source: Reference No. 3

Figure 2:Changes in Onset Rate and Death Rate of Cerebrospinal Meningitis in China, 1950~1983



Source: Reference No. 8

CHAPTER 6:

ON-SITE SURVEY REPORT

1. Outline of Jilin Province

(1) Social and Economic Background of Jilin Province

Regional Characteristics

Jilin Province is located in the middle of the northeastern section of China, longitude 122-131 E. and latitude 41-46 N., almost the same latitude as Hokkaido. It covers 187,000 square kilometers, which is approximately half the size of Japan. In the southeast are the Changbaishan Mountains. It is bordered on the east by the Democratic People's Republic of Korea, adjacent to Liaoning on the south, Inner mongolian autonomous region on the west, and Heilungjiang on the north. Gradually descending vast hills and plains extend north and northwest from the magnificent Changbaishan Mountains. Consequently, all major rivers in Jilin Province run north. With a subarctic continental climate and annual mean air temperature of 4-5 C, the province has a long winter (October-April) and a short spring (May) and autumn (September). Summer spans from June to August. Annual rainfall is only 600mm in Chungchun. Frost is experienced 160 days a year. As a result, green vegetables are in short supply in winter.

Jilin Province is rich in natural resources, being one of the greatest producers of coal, oil, nickel, gold, copper and other minerals. Moreover, animal breeding (sheep, cattle and horses) and agriculture (soybeans, kaoliang, corn, sugar beets and flax) are extensively carried on in this district.

Jilin Province's population is 22,980,000 with a density of 123/km^2. The farming population accounts for 45% of the total and urban the remaining 55%. In terms of race, 92% of the population is Hang and the other 8% comprised of minority races. Among minorities Koreans amount to 1.1 million, accounting for 60% of the minority population, and Manchurians 520 thousand for 28%, the Huizu 110 thousand - 6%, Mongolians 90 thousand - 5%, and the rest are Xibozu, Zhuangzu, and Miaozu. Most Koreans live in Yanbian and also in Jilin and Tonghua. The Manchurians live mainly in Jilin, Siping and Tonghua. The Huizu spread equally in Changchun, Jilin, Siping and Baicheng. As many as 90% of the Mongolians live in Baicheng.

Industrial Structure

Table 1 outlines the industrial structure of Jilin Province based on social total output. Shares by industry basically have changed very little over the last 10 years. The manufacturing, and transportation and communications industries' shares have decreased slightly while construction has increased. The manufacturing industry accounts for 60% of the industrial structure, which evidences manufacturing as the major

industry of Jilin Province. On the other hand, commerce's share is less than 6%. This would not be possible in nations having capitalistic economies. This is probably because under the Chinese socialistic system, some functions substituting for the commercial sector exist in other industrial sectors (such as selling and distribution of goods within a division of an enterprise related to agriculture or manufacturing). Even if nominal wages are low, if allowances in kind and distribution of goods and services almost without charge increase, it is likely that economic activities not counted in prices are overlooked in the industrial structure. Consequently, it is not reasonable to compare the industrial structure of China based on social total output in the statistics of China (Jilin Province) with that of Japan based upon G.N.P. Another characteristic of Jilin, according to Chinese statistics, is that fluctuations in industrial shares are extremely stagnant, although social total output has been sharply increasing since 1980. There is no leading industry, which usually emerges in the period of high economic growth, listed in the statistics and all industries appear to have developed equally. Therefore I cannot read into the trends in shifts in the industrial structure.

Employment Structure

Of the 8.63 million total employed population of Jilin Province in 1984, 4.03 million were engaged in agriculture, 2.24 million in the manufacturing industry and 2.36 million in other industries, which accounted for 46.7%, 25.9% and 27.4% respectively. Regarding the ratio each industry has held since 1978, that of agriculture declined from 53% in 1978 to 47% in 1984, while other industries increased from 22% to 27%. The manufacturing industry maintained a rate of around 26% for that period. Approximately 50% of the total employed population are in the service of state-operated sectors, which constitutes a characteristic feature of a socialist economic system (see Table 5-2).

(2) Administrative Organization and Procedures for Policy Implementation

Administrative Organization

The current administrative organization is based on the constitution framed in 1982. Using Jilin Province as an example, I would like to explain the administrative organization at the province level.

At the top is the People's Congress of Jilin Province, and the People's Government which is a local self-governing body, equal to Japan's prefectural government. Under them, cities and autonomous states and regions also function as local self-governing bodies. These

autonomous states and regions in Jilin Province are residential areas with a concentration of minority races. Each city and autonomous state or region has wards, prefectures and cities which are also local self-governing bodies. These cities are lower in the hierarchy than the above mentioned cities. In order to distinguish between them, cities under province administration are referred to as province-governed cities and those under autonomous states or regions, prefecture-rank cities.

Province-governed cities can be regarded as big cities while prefecture-rank are smaller. In province-governed cities, there are wards implying specific urban areas having autonomous rights as mentioned, as well as the People's Congress and People's Government. Province-governed cities also control self-governing bodies called prefectures which means rural areas on par with wards but not urban areas.

Among province-governed cities, Changchun (capital of the province) and Jilin have wards of urban as well as rural areas which administratively are titled wards but are called suburban wards in general.

Each of the above-mentioned self-governing bodies holds a People's Congress at least once a year and the Standing Committee elected by the People's Congress is a legislative organ. As an administrative organ, the People's Government consists of the governor of the Province and mayors of cities, regions and prefectures. As a judicial organ, the Supreme People's Court is also selected by the People's Congress. (The Chief of the People's Prosecution Board is also elected by the People's Congress.) Members of the People's Congress of the province, province-governed cities, autonomous states and regions are elected by the People's Congress of self-governing bodies at the lower level and their tenure of office is five years. Members of the People's Congress of wards, prefectures and prefecture-rank cities are directly elected by inhabitants, with tenure of three years. The tenure of the head and staff of each People's Government is equal to that of members of the People's Congress.

Under prefectures and prefecture rank cities, there are self-governing bodies called Zhen (town) and Xiang (village). Zhen correspond to self-governing districts and xiang correspond to self-governing villages of Japan. Each town and village have a People's Congress whose members are directly elected by inhabitants as well as the People's Government elected by the People's Congress. Office tenure is three years uniformly. In general, prefectural population is considered to be farming population. Recently, however, that of town in a prefecture seems to be regarded as urban population. As a result, population statistics of recent years show a remarkable increase in urban population since 1984 and lack conformity on statistic tables.

Administrative organs of wards, towns, villages and the above are local administrative organizations stipulated by the 1982 constitution, having the right of autonomy. Those organs on the lower level, however, are a part of the smallest unit of the administrative organization of the above mentioned self-governing bodies. For instance, there are some Branch Offices in certain wards which have the same function as a branch office of a ward office in Japan. Each area of a ward has a residents' committee with sub-committees, similar to Japanese town or community groups. There are old hamlets and settlement hamlets having several villagers' subcommittees in each village.

Figure 1 shows the administrative organization of Jilin Province. The number of wards, prefectures, cities, town and villages is subject to change according to population growth and development conditions in urban facilities.

Policy Implementation Process

We conducted research in Jilin province on the policy implementing process in the administration of public welfare, with emphasis on the family planning program, which is considered to be one of the most important policy goals in China today. The results will be examined here.

<Organizational Structure to Implement the Family Planning Program>

Figure 2 illustrates the organizational structure to implement China's family planning program. The organizations listed at or below the provincial level are also active in Jilin province. Of those organizations, the primary responsibility for implementation of family planning policy lies in the organizational line under the "Family Planning Commission". A family planning commission has been established at every administrative level from the central government, province, city, and prefecture to village or town. In the same organizational structure, stage-controlled and other huge enterprises have their own family planning committees which are similar to their governmental counterparts. In hamlets and blocks of residents, self-governing communities, there are people assigned to be in charge of family planning. The Family Planning Commission in Jilin province has medical, family planning research, training, and promotion centers. Furthermore, at every administrative level below the municipal level, there are medical and service centers which provide carefully thought out family planning guidance to individual residents.

Not only administrative organizations under the Family Planning Commission but various other organizations are actively involved in the implementation of the family planning program. First, there are

administrative organizations under the State Council and local administrative bodies at provincial, municipal, and prefectural levels specialized in medical and health care services. Second, such organizations as the Communist Party of China, the Chinese Communist Youth League, National Federation of Labor Organizations, and National Federation of Women have set up their own organizations in charge of family planning, corresponding to administrative organization at each level. Moreover, the Family Planning Association of China has offices at central, municipal, and prefectural levels in order to promote and advertise family planning education. In addition, in academic circles, including universities and the Chinese Population Society, family planning ranks as the most important research subject.

In such a multi-dimensional administrative structure to implement a family planning program, members of the following policy implementing bodies approach individuals: (1) Family Planning Commissions and related administrative agencies of the local self-governing body (People's Government) in provinces, cities, prefectures, villages, and towns; and (2) local and smallest units of Labor Unions and other organizations organized under the Communist Party of China. (3) Individuals are also approached at their job sites by members of the organizations listed in (1) and (2). Especially, in state enterprises and people's communes, management and labor organizations work cooperatively on family planning programs.

<Reinforcement of the One-Child Policy>

The Chinese Government has set a goal to quardruple agricultural and manufacturing production between 1981 and the end of this century. At the same time, it intends to control total population so as not to exceed 1.2 billion. In order to achieve these two goals simultaneously, the one-child policy has been vigorously implemented and reinforced with economic and social incentives as well as disincentives directed at those who do not conform. These reinforcemnts have a national and general framework whereas a local framework is set by each province. Other measures are taken within the managerial capacity of each state enterprise and collective enterprises. The following reinforcement measures are currently in effect in Jilin province: (1) a monthly subsidy of 5 to 6 yuan is given to agricultural households certified as one-child families; (2) priority on land allotment; (3) approval to grow additional fruit trees; (4) expansion of free trade quota on agricultural products; (5) increased fertilizer allocation; (6) priority to family members for employment in agricultural administrative entities; (7) other allowances set by each commune. For urban residents the following incentives are furnished: (1) financial assistance for rent; (2) additional one-month maternity leave; (3) annual financial aid to support living, which is equal to one-month's salary; (4) six-month educational allowance; (5) preferential admission of the child to

kindergarten and advanced schools; (6) preferred employment by state organizations and corporations; and (7) other special allowances and assistance set by corporations and organizations. On the other hand, for those who do not conform to the one-child policy, the following disincentives are applied: (1) cash penalty of 5-10% of income; (2) additional quota delivery of agricultural products imposed on agricultural households; (3) cuts in acquired land allotments; (4) and in some areas, an additional social imposition is collected. (Note 1) As such, there are various reinforcement measures in Jilin province, and some of them are direct administrative measures taken by the local government while others are adopted by state corporations or communes. The latter measures are carried out with first priority. In this regard, unlike capitalist nations, such as Japan, as a socialist nation, China's work places and administrative organizations provide cooperative measures and make a unified effort to implement the policy even though a certain degree of autonomy is granted to each enterprise.

<New Measures to Deal with Individual Enterprises>

In accordance with economic policy adopted in the 1980's and the establishment of the new Constitution, the number of independent businessmen called "individual enterprises" has been increasing recently. At present, most of them are small enterprises individually owned or jointly owned and operated by a small number of people, but some of them are more like private sector enterprises with substantial numbers of employees. These individual enterprises have brought about a new group of people, who are not accurately seized by labor organizations or administrative bodies. That is, they are independent of state enterprises and other organizations and engaged in sales activities exceeding the fields of self-governing organizations. The number of this group of people is substantially increasing. They are to be directly controlled by local governments. Especially, some of the incentives and disincentives are not practical nor effective for use with this emerging group so it is necessary for the local government to establish new policy measures appropriate to deal with these people. In Jilin province, the policy that beneficiaries of services should assume a part of the cost has been promoted in public organizations and systems, including medical facilities and schools. In other words, those who are engaged in individual businesses are not qualified to receive welfare and social services usually provided at work sites, such as state enterprises or people's communes, which are united with government policy. Thus, individual business people must assume the full cost of such fundamental social services as medical care, education, housing, and pension plans. The increase in these individual-business households will certainly promote economic development on the one hand. On the other hand, however, it will impose a risk of expanding the social sector in which a family planning program cannot be effectively implemented.

<Feedback of Field Experience to Policy Planning>

The one-child policy in China started in 1978 and has been more generally implemented since early 1980. Family planning was determined as the legal responsibility of the people according to amendments of the Marriage Law in 1980 and amendments of the National Constitution in 1982. At the same time, guidance regarding the one-child policy given to members of the Central Committee of the Chinese Communist Party started the practical implementation of the family planning policy. (Note 2) However, since uniform application of the one-child policy is unattainable as well as undesirable from a political point of view, some exceptions have been made. There were four exceptions permitted from the beginning: (1) If the first child has physical handicap; (2) If a couple has a foster child; (3) If either husband or wife of a remarried couple has a child; (4) If both husband and wife are from minority goups. In these cases, they are allowed a second child. Later, reflecting various experiences in the implementation process of the policy and a variety of opinions, some other exceptions were added, and each province is allowed to establish its own rules to some extent. Jilin province has set the following exceptions to the one-child policy:

(1) If a couple has a child with a physical disability except for genetic damages;
(2) If the first child is a foster child;
(3) If both husband and wife are only children;
(4) If a couple are Chinese returned from overseas;
(5) If either husband or wife of a remarried couple has two children (only one child was allowed in 1982);
(6) If the family has only one child over more than two generations;
(7) If husband or wife is an only child;
(8) If either husband or wife is physically handicapped;
(9) If the first child has second-class B physical disability;
(10) Only one of the siblings has the ability to bear children;
(11) Minority nationals (It used to be required that both husband and wife be minorities, but in 1984, the rule was changed. Presently, it is only necessary that either the husband or wife be a minority.)

In each one of the above cases, the couple are allowed to have two children. These exceptions have been in practice since 1984 (Note 3). These exceptions were set reflecting various administrative experiences and practical researches on birth in Jilin province.

(3) Current Status of Population and Family Planning

Changes in Vital Statistics

Figure 3 shows changes in birth rate, death rate and the natural

growth rate in Jilin Province since 1949. The birth rate peaked during 1962 and 1972, indicative of baby booms. As for the trend, which will be discussed in detail later, a small peak is noted after 1980. This is because the baby boom generation has reached reproductive age and easing of family planning policies yielded some results. It is worth noting that in Jilin Province the death rate started to decline earlier than the national average. Due to a lower death rate, the trend of natural growth rate reflects birth rate. The lower death rate also seems to contribute to the decline in birth rate.

Fertility Trend

Regarding changes in age specific fertility rate (ASFR)in Jilin Province, it is concentrated in certain age groups. Tables 4 and 5 show ASFR in the urban and rural areas of Jilin Province in 1967, 1972, 1977 and 1982. As the tables indicate, the total fertility rate depicts a downward tendency and the peak of fertility tends to concentrate in a specific age group. Especially in urban areas these tendencies are clearly observed, where fertility marks a higher level age group from 20 to 35 years old. On the contrary, in rural areas the age range is wider with fertility of younger age groups higher than those in urban areas. In rural areas, however, bearing ages have risen. According to Table 5, there is a tendency of concentration of fertility to certain age groups and fertility has declined remarkably, especially in age groups 40 and above.

Figure 4 is a comparison of Jilin Province and Japan on fertility by age group in 1982. The total fertility rate of Japan is 1.74, lower than the standard of urban areas in Jilin Province. In Japan, fertility peaked at around 25 to 30 years old. Changes in fertility by age in Japan and urban areas of Jilin Province are similar. The highest point of the fertility curve of Japan is lower than that of Jilin Province and the fertility of age group 30-35 is higher in Japan than in Jilin Province, which means later parturition is more common in Japan.

Table 6 indicates the number of children born and of surviving children. The number of children is 2-3 in age group 30-34, 3-4 in that of 35-40 and 4-5 in that of 40-44. The average number of children who died in age group 40-44 is 0.42. Those who are 45 years or older have more than five children. Those in the group 35 years and older, married before the "single-child policy" was imlemented. The average number of children in those age groups is higher than for women in their twenties.

Fertility Trend in the 1980s and Family Planning

In Jilin Province, a family planning policy of "one child for one couple," has been advocated since 1979. In this section, the fertility

trend is discussed in relation to that policy.

In the 1980's as opposed to the 1970's, there are some political turnabouts. One is related to marriage age. In the 1970's, the age of first marriage was stipulated by an administrative measure as 25 years old for men and 23 for women. Under the new marriage act, enacted in 1980, that administrative measure was deleted and a man can now marry at 22 and a woman at 20. As a result, the trend of later marriage which had progressed before 1980 ceased and the age of first marriage has been declining.

As mentioned above, the policy of "one child for one couple" had been advocated since 1979. Regarding delivery of a second child, the limitation is being eased, dependent on circumstances. In 1981, delivery of a second child was allowed when one of the following four conditions was met: (1) their firstborn suffered from a congenital disease, (2) a child of their own is born after adoption, (3) in case of a second marriage of a man and a woman both having a child, (4) in cases of minority race. In 1983, the above conditions expanded to 10, and a second childbirth is allowed when one is fulfilled. How has the above-mentioned administrative measure on marriage age and family planning inpacted on fertility? Table 7 indicates the crude birthrate and total fertility since 1980. As mentioned in Figure 3, the baby boom generation (1962 to 1972) has entered reproduction age and fertility has increased since 1986.

Table 8 shows fertility classified by order of childbirth. It should be noted that fertility of a second child has been on the rise since 1984. According to a prediction by Mr. Chen Shengli, Deputy Chief and Statistician of the Family Planning Commission of Jilin Province, fertility rate of a second child will increase, while that of a third child will remain at the current level. In comparison with fertility by parity in the 1970s, there is a tendency for fertility to be concentrated in the first child. It can be assumed that people have abided by the "one child for one couple" policy.

As for the number of childbirths in 1986, that of a first child was 290 thousand, second - 108 and third - 22. Among them, the number of unplanned childbirths totaled 102 thousand, as follows; 20 thousand due to early marriage at 20 or younger, 60 thousand second children born without meeting any of the above mentioned conditions and 22 thousand third children. Main reasons for unplanned childbirths are contraceptive failures and missing an opportunity for an abortion. There are a few who wanted a third child.

(4) Health and Sanitation Situation and Problems

Process of Implementing Maternal and Child Health Care Program in Jilin Province

The maternal and child health care program was initiated in 1978 and further improved in 1982, which is above the national average. As for activities carried out under the maternal and child health care program, the 1950s were devoted to new methods of delivery. In the 1960s, women's disease examinations were conducted. Guidance on family planning and infant group examination for reducing the death rate got underway and diffused in the 1970s. In the 1980s the control system for eugenic protection was reinforced, placing emphasis on systematic control of expectant and nursing mothers as well as on maternal health care pre- and post-delivery.

The implementation rate of check-ups for expectant and nursing mothers is 80% in urban areas and 40-50% in rural areas. The Chief of the Maternal and Child Health Division of the Public Health Bureau in Jilin Province, Ms. Chang Guizhi, pointed out the reasons for the implementation rate not reaching 100% in urban areas as follows: (1) check-ups are not given to the immigrants in the urban area, (2) due to the lack of health centers in outskirts, check-ups are not available and/or, (3) lack of a doctor in charge of systematic control of check-ups. Measures for immigrants to urban areas, which tend to increase, as well as reinforcement of the smallest unit of a health organization will become important problems to be solved. The implementation rate of expectant and nursing mothers' check-ups in rural areas is far lower than urban areas and medical care service conditions are not necessarily adequate. This is because the smallest unit of the administrative organization is fragmenting and health care centers in districts and local communities are disappearing due to recent economic changes. It is forecasted that economic changes will be carried forward further. Consequently, it remains to be seen whether administrative measures in accordance with economic changes will be undertaken in both urban and rural areas.

Maternal and Child Health Care Organizations in Jilin Province

In relation to the implementation problems of expectant and nursing mothers' check-ups, I wish to discuss the maternal and child health care organization system. Medical organizations in Jilin Province is as follows:

Health Center for Mothers and Children
- Provincial Health Clinic for Mothers and Children (1)
- Municipal or Local Health Centers (9)
- Prefectural (Ward) Health Centers (54)

Using preventive inoculations as an example, I would like to explain the various activities of the above medical organizations. Since inoculation systems are different in urban and rural areas, these activities will be explained separately.

In urban areas, each sanitation and epidemic prevention center reserves a car and medical supplies for emergencies. Each neighborhood health center has serum for vaccinations, and a record is maintained on people vaccinated for notification of families. As for areas having no neighborhood health center, notification is through the preventive health department of a general hospital.

In rural areas, prefectural sanitation centers are in charge of vaccination of inhabitants of a prefecture, by a medical service on wheels. Through an epidemic prevention and health association in each village, local doctors notify families and the doctors record the data and manage them accordingly.

Current Status of Medical Organizations and Staff

Table 9 shows the current status of medical organizations and their staff in charge of health services mentioned above, indicating the number of hospitals and beds in urban and rural areas. The number of hospitals in rural areas shows a downward trend due to realignment of administrative blocks implemented between 1980 and 1985.

As a result of the realignment of administrative blocks, it is impossible to compare urban with rural areas. Changes in the province as a whole, however, are shown in Table 10, i.e., population under the control of one hospital has decreased, while medical staff, organization, and service has improved.

Before the implementation of realigning administrative blocks, access to medical services was better in urban than rural areas, which affects the mortality standards in the respective regions. Figure 5 shows mortality by age group in urban and rural areas. Mortality in all age groups is lower in urban areas. Especially mortality in age group 0-4 and 70 and up is higher in rural areas, which evidences the difference in the quality of medical service.

Infant Mortality and Place of Delivery

As Figure 5 shows, there is a large difference in infant mortality (0-4 age group) between urban and rural areas. Notification of death is mandatory but there is doubt in the reliability of the system because:
(1) capability of dealing with such notifications is low;
(2) the level of health nurses and midwives is low;

(3) responsibility for maternal and child health is low; and
(4) there are some areas where geographical conditions are bad and there are no midwives.

Due to the above, it is difficult to compute infant mortality based upon notification. Consequently, infant mortality is estimated based upon the results of a sampling in a model area. According to the estimate, infant mortality in urban areas is 14.3 per 1,000 childbirths and in rural areas, 37.4. Medical treatment at delivery is a factor affecting infant mortality, and while the hospital delivery rate is 90% in urban areas, it is only 30% in rural ones. Community doctors help an expectant mother to deliver in rural areas but in the event the delivery is deemed to be high risk, she is introduced to a hospital.

Current Problems of Child Health Care

As the policy of "one child for one couple" becomes more prevalent, it is urgent to establish a medical service system which can cope with and provide care for children to grow up in perfect health. Especially for infants, systematic controls (from 42 days to seven years old) and the following administrative services have been implemented.

(1) Registration in a card system
(2) Medical examination by age group

0-1 years old	four times a year
1-2 years old	twice a year
3-7 years old	once a year

(3) Prevention of major outbreaks of diseases in general and those peculiar to children.
(4) Cooperation with epidemic prevention divisions.
(5) Health guidances given in cooperation with the staff of a nursery school who are in charge of sanitation.

Regarding (2), efforts are made in decreasing neonatal death which accounts for 70% of infant death. The implementation ratio of examination is 85%. One hundred percent of those infants who attend a kindergarten or nursery school receive a medical examination, while only 25% of those who stay home do. As for (3), the major children's diseases are rickets, undernourishment, anemia, pneumonia, diarrhea and eye disease. Many of them are diseases caused by a vitamin deficiency. No system related to eating habits, such as guidance on nutrition, has been established. Therefore, publicity activities and reinforcement of services in this field should be given high priority. As far as (4) is concerned, it is hoped that vaccination will be systematized to produce immunity. Regarding (5), since the rate of vaccination of children attending nursery schools or kindergartens is very high, it is concluded that cooperation from nursing school is effective in child health.

Future Problems in the Implementation of Maternal and Child Health Care

There is a plan to implement a system before 2000 whereby all mothers and children can receive health care services. In this regard, efforts are focused on improvement of medical treatment standards at the grassroots level. Emphasis is placed upon disease prevention and improving collaboration with other organizations, i.e., women's federations, family planning, and public service activities.

Notes:

(1) Based on the hearing from the Family Planning Commission of Jilin Province.

(2) Guidelines for the Members of the Chinese Communist Party Regarding Population Control and the Problem of Population Increase, September 25, 1980.

(3) Governmental Documents of Jilin province. Vol.84, No.111 and Vol.85, No.19.

Table 1 Comparative Table of Climatic Conditions (average 1951-80)

Item	Average temperature (C)			Precipitation (mm)		
Month	Beijing	Changchun	Tokyo	Beijing	Changchun	Tokyo
Jan.	-4.6	-16.4	4.7	3.0	3.5	54
Feb.	-2.2	-12.7	5.4	7.4	4.6	63
Mar.	4.5	-3.5	8.4	8.6	9.1	102
Apr.	13.1	6.7	13.9	19.4	21.9	128
May	19.8	15.0	18.4	33.1	42.3	148
Jun.	24.0	20.1	21.5	77.8	90.7	181
Jul.	25.8	23.0	25.2	192.5	183.5	125
Aug.	24.4	21.3	26.7	212.3	127.5	137
Sep.	19.4	15.0	22.9	57.0	61.4	193
Oct.	12.4	6.8	17.3	24.0	33.5	181
Nov.	4.1	-3.8	12.3	6.6	11.5	93
Dec.	-2.7	-12.8	7.4	2.6	4.4	56
Annual	11.5	4.9	15.3	644.2	593.8	1460

Source: Chinese Statistical Yearbook 1986, Japanese Statistics Yearbook 1984

Table 2 Total Social Output of Jilin Province

(unit: 100 million yuan)

Year	1975	1978	1980	1983	1985
Total output	158.8	180.1	219.9	298.1	422.2
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Agriculture	37.4	40.3	51.9	82.6	98.9
	(23.6)	(22.4)	(23.6)	(27.7)	(23.4)
Industry	97.1	109.6	130.3	167.5	243.8
	(61.1)	(60.9)	(59.3)	(56.2)	(57.8)
Construction	9.7	13.2	17.1	22.0	40.3
	(6.1)	(7.3)	(7.8)	(7.4)	(9.5)
Transportation and communications	6.9	8.2	11.4	10.4	14.4
	(4.3)	(4.6)	(5.2)	(3.5)	(3.4)
Commerce	7.7	8.8	9.2	15.6	24.9
	(4.8)	(4.9)	(4.2)	(5.2)	(5.9)

Note: The above figures are based upon current prices. Figures in parentheses indicate percentage.

Source: Statistical Bureau of Jilin Province, Jilin Statistical Yearbook 1986.

Table 3 Employment Structure of Jilin Province

(unit: 10 thousand)

Year	1975	1978	1980	1983	1984
Total number	594.4	645.4	715.4	847.5	862.5
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Manufacturing		163.7	187.4	218.2	223.6
		(25.4)	(26.2)	(25.7)	(25.9)
Agriculture		341.7	361.8	410.7	403.0
		(52.9)	(50.6)	(48.5)	(46.7)
Others		140.0	166.2	218.6	235.9
		(21.7)	(23.2)	(25.8)	(27.4)
Nationally-operated sectors	256.8	324.9	373.9	421.9	431.3
	(43.2)	(50.3)	(52.3)	(49.8)	(50.0)
Others	337.6	320.5	341.5	425.6	431.2
	(56.8)	(49.7)	(47.7)	(50.2)	(50.0)

Note: Figures in parentheses indicate percentage.
Source: The Statistical Bureau, Jilin Statistical Yearbook 1984, Jilin Province

Table 4 Changes in Age Specific Fertility Rate, Urban Areas of Jilin Province

Year / Age	1967	1972	1977	1982
15-19	0.010	0.008	-	-
20-24	0.151	0.134	0.075	0.153
25-29	0.224	0.288	0.258	0.210
30-34	0.139	0.182	0.080	0.013
35-39	0.054	0.063	0.027	-
40-44	0.081	0.013	0.007	-
45-49	0.023	-	-	-
Total	3.412	3.435	2.235	1.879

Source: Ansley J. Cole and Chen Sheng Li, Basic Data on Fertility in the Provinces of China, 1940 to 1982, East-West Population Institute, Honolulu, 1987

Table 5 Changes in Age Specific Fertility Rate, Rural Areas of Jilin Province

Year / Age	1967	1972	1977	1982
15-19	0.061	0.041	0.013	0.011
20-24	0.337	0.306	0.163	0.197
25-29	0.352	0.372	0.156	0.147
30-34	0.260	0.213	0.060	0.026
35-39	0.228	0.190	0.052	0.013
40-44	0.118	0.090	0.009	0.006
45-49	0.019	0.009	0.007	-
Total	6.874	6.109	2.299	2.000

Source: Ansley J. Cole and Chen Sheng Li, Basic Data on Fertility in the Provinces of China, 1940 to 1982, East-West Population Institute, Honolulu, 1987

Table 6 Number of Children ever born and Surviving Children by Age Group of Women, 1982

Age group	Average number of Children ever born	Average number of surviving children	Average number of deaths
15-19	0.01	0.01	0.00
20-24	0.40	0.38	0.02
25-29	1.50	1.43	0.07
30-34	2.66	2.51	0.15
35-39	3.68	3.41	0.27
40-44	4.62	4.20	0.42
45-49	5.57	4.92	0.65
50-54	6.24	5.27	0.97
55-59	6.23	4.94	1.29
60-64	5.93	4.41	1.52
Total	2.48	2.19	0.29

Source: Jilin Province Office of Population Survey, Report on the 3rd Population Census in Jilin Province, p.361, Changchun, January 1984

Table 7 Fertility in Jilin Province (1980 to 1986)

Year	Crude birthrate ( )	Total fertility rate
1980	17.54	1.96
1981	17.59	1.85
1982	18.31	1.91
1983	16.21	1.69
1984	15.06	1.59
1985	16.79	1.65
1986	18.79	

Source: As stated by Mr. Chen Shengli, Deputy Chief Statician Officer of the Jilin Provincial Family Planning Commission

Table 8 Fertility by Birth Order

Year	1st child	2nd child	3rd child
1980	1.02	0.57	0.37
1981	1.13	0.45	0.27
1982	1.30	0.41	0.22
1983	1.21	0.34	0.14
1984	1.68	0.40	0.11
1985	1.06	0.44	0.15
1986	1.17	0.52	0.11

Source: The same as Table 4

Table 9 Statistics Related to Medical Organizations in Jilin Province, 1980 and 1985

Item related to Medical Field	1980	1985
Number of hospitals		
Urban	256	419
Rural	1,003	900
Number of beds		
Urban	31,441	35,466
Rural	29,241	35,284
Number of doctors	34,544	39,819
Number of nurses	16,113	20,867
Health related organizations		
Hospital	1,259	1,319
Sanitariums	30	33
Special centers for prevention and treatment	60	58
Sanitation and epidemic prevention center	81	89
Health centers for mothers and children	71	83

Source: Statistical Bureau of Jilin Province, Social and Economic Statistical Yearbook of Jilin Province 1986, Changchun, 1986

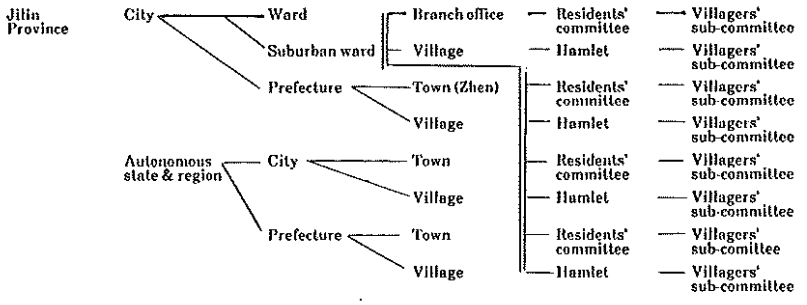
Table 10 Population per hospital, medical organization, bed, one doctor and nurse

(No. of persons)

Medical organization & personnel	1980	1985
Per hospital	17,559	17,422
Population per medical organization	196	164
Per bed	364	325
Per doctor	640	577
Per nurse	1,372	1,101

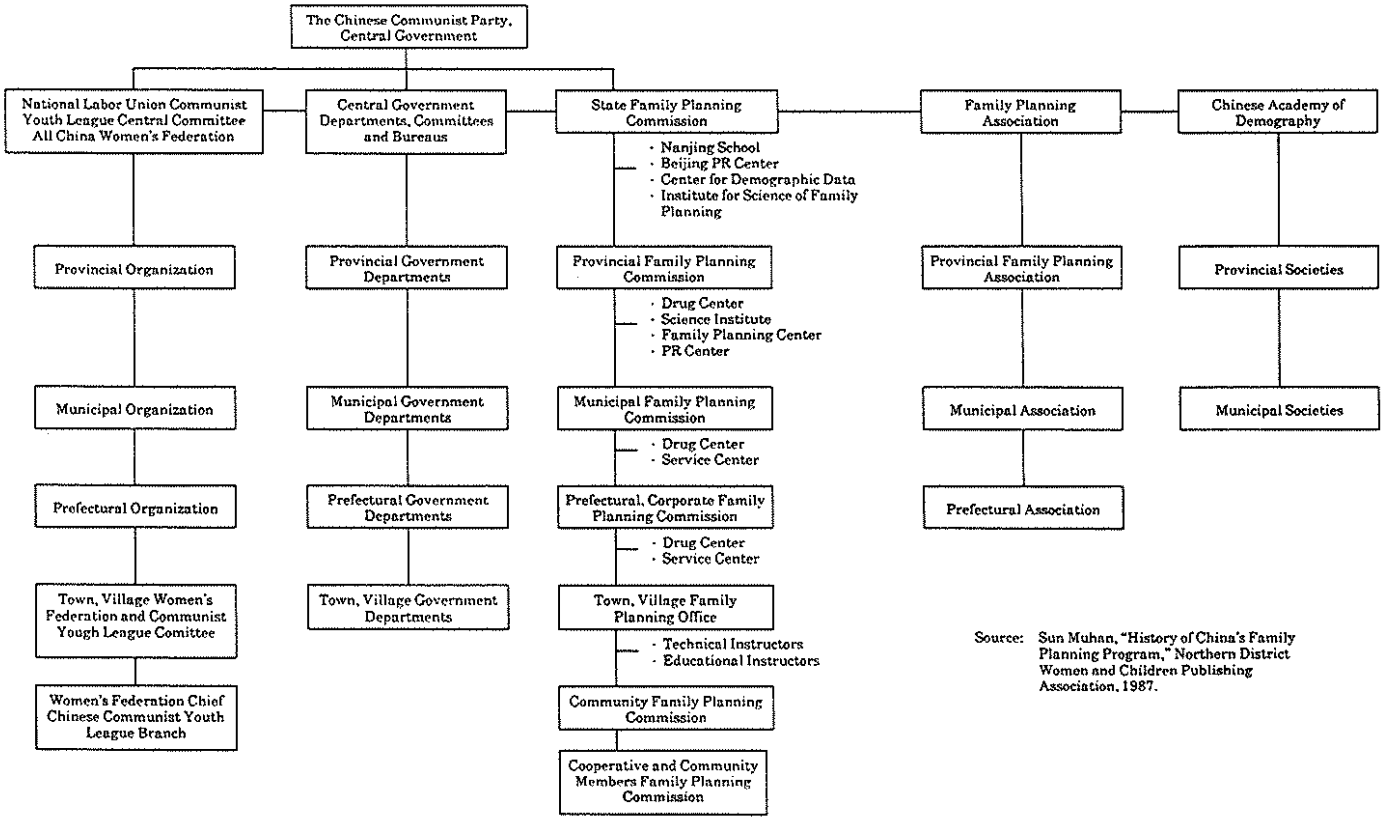
Source: Same as Table 6

Figure 1 Administrative Organization of Jilin Province (as of February, 1985)



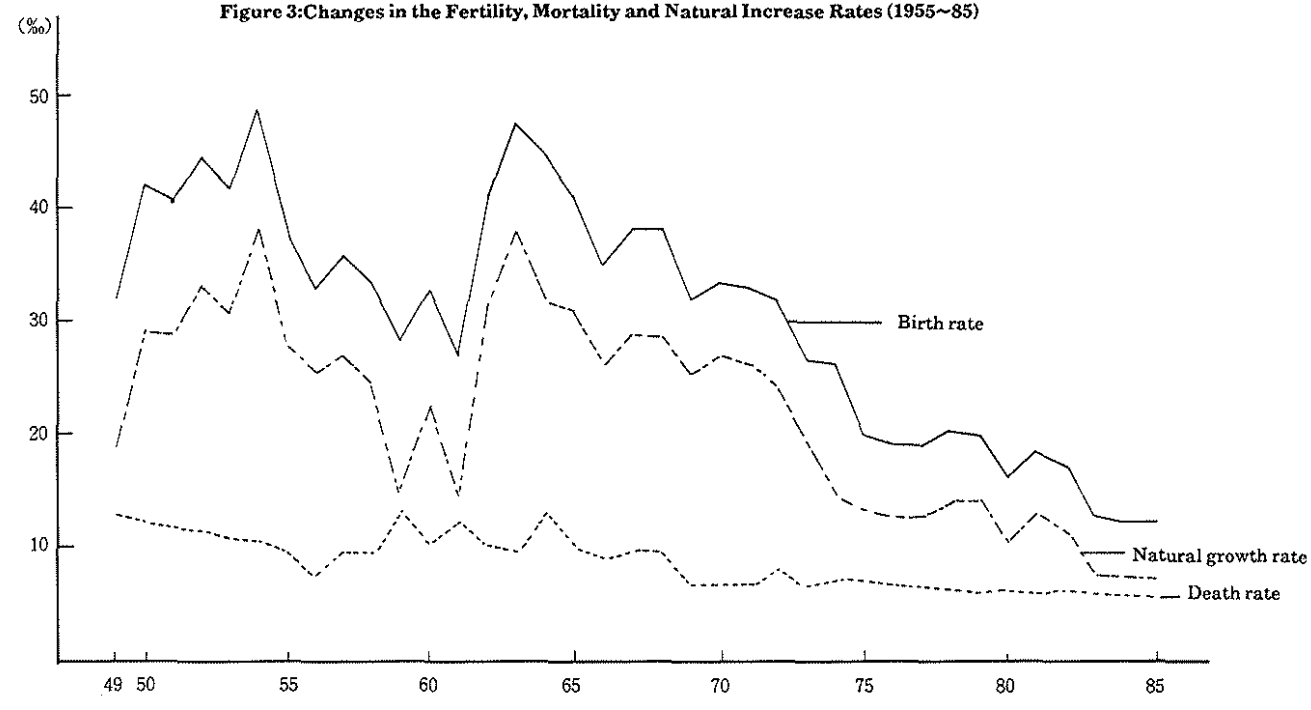
← Self-governing body →				Smallest unit of administrative organization →	
Jilin Province	Changchun	Changchun Nong'an Dehiri Yushu Jiutai Shuangyang			
	Jilin	Jilin Yongji Shulan Jiaohe Huadian Panshi			
	Siping	Siping Lishu Shuangliao			
	Liaoyuan	Liaoyuan Dongfeng Dongliao			
	Tonghua	Tonghua (ward) Tonghua Ji'an			
	Hunjiang	Hunjiang Fusong Jingyu Changbai Chaoxianzu Zizhixian			
	Meihekou	Meihekou Huinanjiang Liuhe			
	Gongzhuling	Gongzhuling Yitong			
	Yonbian Korean District	Yanji Tumen Dunhua Longjing Wangqing Hunchun Helong Antu			
	Baicheng	Baicheng Zhenlai Daan Fuyu Qian Changlin Tongyu Tao'an Gorios Mongolzu Zizhixian			
Total	8 cities, 1 state, 1 region	23 wards, 4 cities, 35 prefectures	281 town, 652 villages	10,162 hamlets	

Figure 2 Flow Chart for Family Planning Policy Implementation



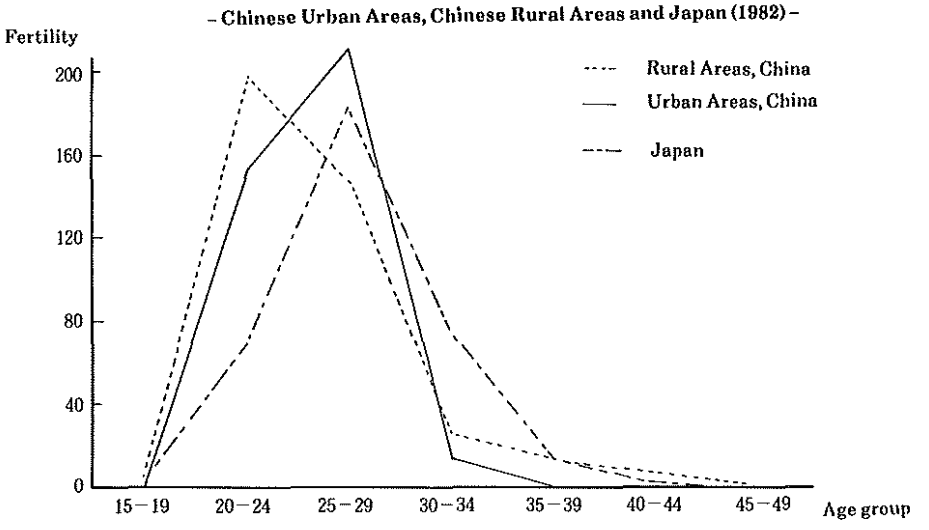
Source: Sun Muhan, "History of China's Family Planning Program," Northern District Women and Children Publishing Association, 1987.

Figure 3:Changes in the Fertility, Mortality and Natural Increase Rates (1955~85)



Source: Statistical Bureau of Jilin Province, Jilin Social and Economic Statistical Yearbook 1986, Changchun, 1986

Figure 4: Comparison of Fertility by Age Groups
– Chinese Urban Areas, Chinese Rural Areas and Japan (1982) –

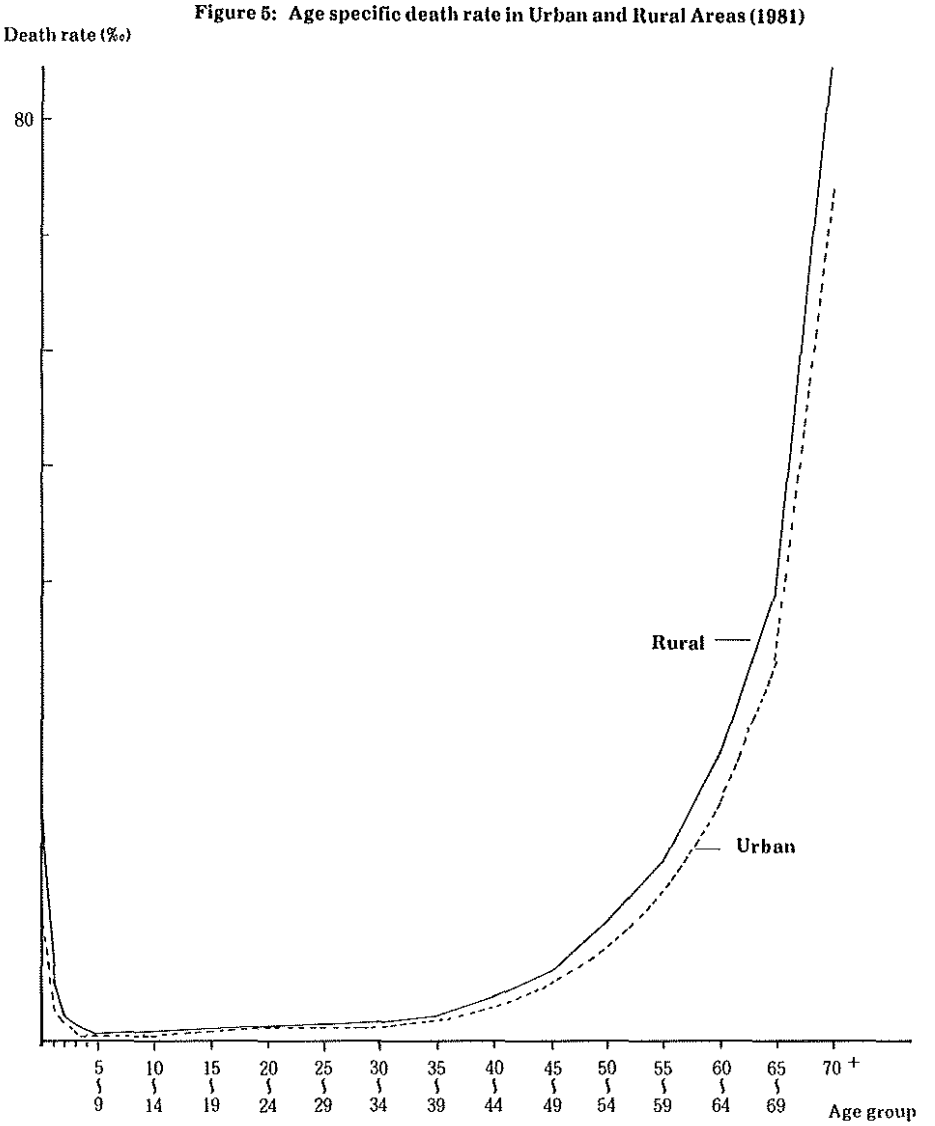


Source:

China: Ansley J. Cole and Chen Sheng Li, Basic data on fertility in the provinces of China, 1940~82, East-West Population Institute, Honolulu, 1987

Japan: Institute of Population Problems, Ministry of Health and Welfare, Major Index of Fertility of Population by Prefecture, 1970 to 1985, 1987

Figure 5: Age specific death rate in Urban and Rural Areas (1981)



Source: Jilin Provincial Bureau of Population Census Changchun, The Third Population Census, Jilin Province, 1984

2. Changchun and Jilin Cities

(1) Social and Economic Backgrounds of Cities

Changchun and Jilin are the two largest cities in Jilin province. The urban population of Changchun and that of Jilin in 1985, excluding their rural populations in "prefectures," are 1.9 million and 1.1 million, respectively. Changchun is the capital of Jilin province and one of the most highly industrialized cities in China, and it is known for its automobile, electric, electronics, and machinery industries. Jilin is an old city with a 300-year history, and at the same time, one of the nation's leaders in the chemical and electric industries. Changchun was built as a "new capital" by the Japanese Occupation Army during World War II, and many buildings constructed around that time are restored and still used. A comparison of these two cities in terms of some indices of social capital and living standards is summarized in Table 1. As shown in this table, the wage level is slightly higher in Jilin, and this seems to be influenced by the fact that Jilin has capital-intensive industries such as the chemical industry and that it produces valuable local products such as ginsen and Piloseantler. In contrast, in the area of infrastructure, such as gas, telephone, water supply, sewage systems, and paved roads, Changchun shows higher rates of penetration than Jilin. Changchun is also superior to Jilin in the area of parks and the average dwelling space. Town maps of the two cities also indicate differences: Changchun is a planned city built from scratch on a plain while Jilin has been gradually developed in accordance with the geographical conditions of the basin.

Keeping these general conditions of the two cities in mind, the present situation and problems of the welfare administration in these two cities will be discussed. The discussion will put an emphasis on the enforcement of the family planning program, based on examples collected through interviews.

(2) Model Cases of the Family Planning Program

Case 1: Family visited in Changchun

The family we visited in Changchun consists of three members: husband, wife and a son. The family is certified by the government as a one-child family. The husband was born in Changchun and is 37 years old. He is a national civil servant working for a printing Center for the Bureau of Geological Survey. The wife is 33 years old and came from Nongan a prefecture on the outskirts of Changchun. She moved to Changchun when she was three years old because her father was transferred in business. She used to work for a state enterprise as a seanstress but started her own business at home to make and sell clothing two years ago. Her business is approved as an "individual

enterprise." Regarding their educational backgrounds, the husband graduated from the middle-high school before the Great Cultural Revolution, later he was trained in the Army, and presently has a position as an engineer. The wife is a high-school graduate.

They married 10 years ago, when the husband was 27 years old and the wife was 23 years old. Their child is now nine years old, a second grader of an elementary school. She had the child at a municipal hospital in Changchun, and since then, the wife and the child have visited this hospital when they were sick. (The hospital is in the same district where the family lives.) There is a clinic attached to the husband's office, but it is small and is not fully equipped. Therefore, employees themselves can get medical treatment there, but their family members are not eligible. However, preventive injections for children are given at the day care center in the father's work place.

The apartment in which they currently live is owned by the Housing Management Commission of the city of Changchun. The two-story brick building with multiple units was built in 1979, and this family lives in one of the units on the ground floor. The size of the apartment is 35 square meters, of which 20 square meters are occuppied by the two bed rooms. In the remaining area, there are a kitchen, a bathroom, and an indoor toilet. The steam heating system is used, in which steam is generated in the kitchen by boiling water. This heating system was installed at their own expense.

Both husband and wife have incomes: the husband earns 130 yuan monthly while the wife's monthly income is 600 yuan. The total household income is therefore about 750 yuan, a high level of income in China. Monthly expenses are about 250 yuan so that they can save as much as 500 yuan. The wife makes good money because the clothes she makes are highly popular among customers for fashionable designs adopted from the new modes in Japan, Shanghai, and Beijing. She started her individual business in 1986, and since then, the family has become a high-income family.

They have acquired knowledge about the family planning program, the one-child policy, and contraceptive methods through the guidance given at the wife's previous work place and the husband's present work place as well as through various forms of advertising, education, and governmental publications. They think that they are satisfied with having one child and that they are saving money for the child's education, occasions when they cannot work, and for their old age. The husband will be eligible for a national pension plan, but, it will not be enough to cover living expenses for two people. They do not want to depend on their child after retirement, and hope to let their child live his own life. The husband's father already passed away, and the husband's mother, who is 75 years old, lives with his elder brother, the second child of the family (the eldest brother also passed away). The

wife's parents are still working and live with her younger brother, who is still single. The couple sometimes gives extra money to their parents for their allowance.

This family is a typical example of the way the family planning program and the one-child policy are accepted in China. More specifically, they got married late, which was also considered to be late marriage the government recommends, have an opinion that one child is enough, and do not plan to depend on their child after they grow old. Moreover, when the child became old enough not to require infant care, the wife opened a tailor shop to make use of her special skill, which unexpectedly increased the family income. The life plan of this couple can be summarized as follows: late marriage, rearing of only one child, child's entrance to school, wife's active social activity, improvement of living conditions, higher education for their child, saving for old age, child's self-support, and stable life after retirement. So far, this couple has had a life exactly as they planned. In the context of their life plan, they understand and properly conceptualize the one-child policy. Even though the couple earns high income, they live in a small 35-square-meter apartment with only two bed rooms. It cannot be said that they live a culturally enriched life. However, they have a TV set, a washing machine, and many pieces of furniture, which are arranged in a crowded fashion. They want a refrigerator, but there is no space for it. When the child grows older, this small living space will present a more serious problem to the couple.

Case 2: Family visited in Jilin

The family we visited in Jilin consists of the husband, the wife, and their female child. Both husband and wife were born in the district in which they currently live, and are categorically considered as farmers. However, they are currently members of a collective enterprise in the district. The husband is one of the leaders of the enterprise and is in charge of store management. The wife is working as a head of the preschool affiliated with the enterprise. This collective enterprise is composed of nine separate businesses, including poultry farming, food processing, machinery manufacturing, and some stores. Both husband and wife were born in 1955 and are the same age (32 years old). They were classmates, graduating from the same high school.

They married at the age of 27, and have a 5-year-old girl (born in 1982). The reason they got married in their late 20s was that the husband joined the Army and returned home at the age of 25. They also observed the family planning guidance of the government suggesting late marriage. The child was born at a local clinic in the district (the Mother and Child Health Center). The child has preventive injections at the health center in the village they live, where professional doctors and promotion staff provide information about mother and child health

care. There is no hospital in the collective enterprise. When a family member gets sick, the person goes to a municipal hospital. The closest municipal hospital is very conveniently located, and it takes only five minutes by bicycle to go there. The wife took medical checkups before and after childbirth at the above mentioned district hospital (the Mother and Child Health Center), but a new mother and child health center has recently opened nearby, and they can also have medical checkups there.

The couple built a duplex with the husband's brother. This two-story duplex is made of bricks, and the total space is 240 square meters (120 square meters for each family). Each house has a bathroom and a kitchen, and is equipped with water supply. The toilets are built outside the house. There are six bedrooms in the house, and three bedrooms upstairs are not used. The couple plans to let their child use those rooms when she gets married. Urbanization has been making progress in the area they live, and they are also planning to rent out the second-floor rooms to make extra income.

The total annual family income in 1986 was about 5,000 yuan. They received a monthly income from the collective enterprise for which they work, and at the end of each year, they are payed bonuses based on the performance of the enterprise during the year. They have almost no savings because the husband and his brother had to borrow 28,000 yuan to build the house, and the couple has been making the repayments as quickly as possible. They borrowed money from their relatives and friends not from financial institutions. The collective enterprise does not have a financing system for its workers. They completed the repayment of the total debts at the end of 1986, and finally they are able to save money this year. Regarding household durable goods, the couple purchased a TV set in 1985, and a washing machine this year. (It seems that a washing machine is more needed than a rerigerator since it is very cold in this region.) The family has a sewing machine, but is has rarely been used recently because there are many shops nearby. The husband's family is a large family with six brothers and one sister. The family lived a tough life. He is the second oldest brother.

The couple has acquired information about the one-child policy and contraceptive measures in study groups, from local promotional staff, publications, and TV promotions. They wish to have two children, but are convinced that one child is satisfactory. They want their child to become a highly respected person, and if she is competent, they hope to send her to college. They will save money from now on for the education of their child, life enrichment, and for their old age. In this district, a 35 yuan-per-month pension will be given when a man becomes 65 years old and a woman becomes 60 years old. Thus, the couple will be able to receive a total of 70 yuan a month, a decent amount on which they can live. The husband's mother lives with her fifth son, who is single. The wife's parents are working in the same village.

As summarized above, the family we visited in Jilin belonged to the collective enterprise (former People's Commune). They are a typical young couple who married late and accept the one-child policy. They also live a steady and commendable life, and were awarded the "Liudonghongji prize." Under the recent economic policy of the central government, the worker's efforts are returned to him as an extra one-time pay at the end of the year in addition to the regular wage. This system serves as an effective work incentive. The young couple's dedication to work and their efforts to establish a new family greatly contribute to the development of the collective enterprise, and the one-child policy is understood as a part of the system. They live in a large house of 120 square meters, and thus there is no need for this couple to worry about living space for additional children. Then, they said they wanted to have two children. However, they have a steady life plan, taking into account the improvement of their living standards, the future life of the child, and a stable life after retirement. The couple's way of thinking seems to be based on a well-planned vision about their own future.

Future Tasks of the One-Child Policy

The above model cases of the implementation of the one-child policy in Changchun and Jilin are both families of middle standing employees in their work places (an engineer working for the government and a leader of the collective enterprise). In addition, their living standards have been significantly improved recently with a rapid increase in family income. Furthermore, in both cases, the educational level of the couple is relatively high (high-school graduates), and they have a very solid and clear life plans. It is also common in these two cases that they manage their life based on their well-planned life plans. Although the number of cases studied is very limited, these cases suggest some very important problems associated with the success or failure of the one-child policy.

Task 1: The model cases studied are both families of middle-standing worker and they are heavily protected by the goverment or the collective enterprise in the fields of medical and welfare services. In addition, both families live in large cities, and they have easy access to various public facilities in the city. They are supported by the comprehensive welfare system to protect the health of their family members. Therefore, for the success of the one-child policy, it is a fundamental condition to spread all over China a social security system providing health and welfare programs for all family members including children. To do so, it will be an urgent task to establish a nation-wide medical and health care system which can provide both effective services in urban areas where population is concentrated and fast services in rural areas where population is scattered. In doing so, the arrangement should be made so that all people can have medical and

health services on a equal basis, regardless of the enterprises for which they work. In short, it is necessary to establish a nation-wide network of effective medical and health care organizations. (For instance, it is necessary to establish first-class medical facilities in major cities, reasonable medical facilities in middle-size cities, and small yet fully equipped and mobile medical facilities in towns and vilages, and then integrate these facilities in a nation-wide network.)

Task 2: In both the Changchun and Jilin families studied, the living standards have shown a rapid improvement in recent years. Accordingly, they take good care of their children and, at the same time, they have come to place much importance on their own lives. In other words, they no longer live in a society where the poverty is taken for granted. Instead, they have come to realize that sincere efforts will make their lives rich and fruitful. If this way of thinking is spread and comes to stay among the Chinese people, the value of each individual will become higher, and more solid and reliable medical and health care services will be needed in order to protect their life and health. Therefore, in order to bring about the success of the one-child policy, the modernization of medical and health care technologies is a significant task in the future, together with the spread of a new way of thinking.

Task 3: Both families we visited have relatively higher educational backgrounds and have carefully thought out their life plans. Providing higher education is also an important condition in order to fully implement the one-child policy in addition to the idea that parents have freedom to decide whether or not they choose to observe the one-child policy. This means that people will be able to forecast their future life to some extent and make their own plans. According to those plans, they decide on the number of children they will have and how to care for their parents so as to live a worthwhile life. It is necessary for the welfare administration to clearly present the meaningful purposes and the specific goals of the family planning program to the public. It is another key point in the future for the success of the one-child policy to change the public's view of the family planning from the idea that it is a policy to control population increase to the idea that it is a policy to achieve a rich and affluent human life.

(3) Current Status of Population and Family Planning

1. Changchun City

Population and Population Composition

The population of Changchun City was 5,842,300 in 1984, of which the urban population was 1,809,200 or 30.97%. Population density in Changchun as a whole was 309/km², while in urban areas it was higher at

1,621/km².

According to the Changchun municipal family planning commission, in 1986 the ratio of the elderly was 4.27% and that of youth was 33.47% with an average age of 22.6 years old, indicating that younger generations account for a larger percentage of the population composition. Average life expectancy at birth was 69.27 years for males and 70.14 years for females.

Migration to Urban Areas and Its Related Problems

In Changchun City, the capital of Jilin Province, migration to urban areas has become a major economic policy problem. As mentioned previously, economic changes in rural areas are one of the reasons that rural to urban migration has been accelerated. The migrant population into urban areas is estimated at 20 thousand annually. Seasonal migration occurs less frequently in winter and more in summer. Migrants are (1) people engaged in the tourist business, (2) construction workers (long- and short-term), (3) retailers and (4) employees in urban areas. Among them, construction workers from rural areas move to cities during farmers' slack season according to an agreement with cities; in other words it is planned migration.

Those who move from rural areas are under the jurisdiction of the government of the areas from which they move. Therefore, their names are not entered in census registers in urban areas. Consequently, the actual population inflow cannot be monitored or controlled, which causes various problems. One problem is the supply of food and housing. Houses are scarce in urban areas and fuel shortages, such as gas shortages, are very severe in the suburbs of Changchun. How to implement a family planning program for migrants remains a problem to be resolved.

Fertility in Changchun City

Fertility in Changchun City is lower than in Jilin Province and Jilin City as a whole. Figure 1 shows fertility by age group in Jilin Province, and Changchun and Jilin Cities. It is clear from the figure that fertility in Changchun City is low in every age group.

Results of the Family Planning Program

Through the process of implementation of a family planning program in Changchun City, a policy of "two children for one couple" was enforced before 1979. From 1980 to 1984, a policy of "one child for one couple" was implemented and a slogan of "later marriage, later breeding

and smaller number of children" was advocated. Since 1984, the family planning policy has been revised and allows for a second child under certain conditions. Stabilization of fertility is a problem which should be solved before the year 2000.

The population growth rate at the time of the 5th 5-year Plan (1976 to 1980) was 10.92% and the crude birthrate 17.41 . The population growth rate at the time of the 6th 5-year plan (1981-1985) was 9.5 and the crude birthrate 11.46 . The crude birthrate was 10.86 in 1985 after the 7th 5-year plan started, but it increased to 11.97 in 1986 due to a baby boom in the early 1960's and an increase in the percentage of a second child due to the "open slightly" policy.

As for contraceptive methods, 490 thousand people use the IUD, 340 thousand have been sterilized and 110 thousand use the pill or condoms. The Jilin Province Institute of Family Planning investigates side effects of the IUD which is the most popular contraceptive method.

As for problems to be resolved, in implementing family planning programs the Changchun municipal Planning Committee spreads educational information, especially knowledge on sanitation and contraception. Regarding the population trend, they mentioned that maintaining a balance of production, i.e. materials and population, is required.

2. Jilin City

Population and Population Composition

According to the report of the Jilin municipal Family Planning Commission, the population of Jilin City in 1986 was 3,965,000, and urban population accounted for 1,100,000 or 29.6%.

The rate of the younger population is 32.4%, of which 13.2% is 0-6 years old and 19.2%, 7-14 years old. The ratio of the elderly is 6.2%, a little higher than Changchun, and average age is 22.6 years old. Similar to Changchun, younger generations account for a larger percentage of the composition. Average life expectancy at birth is 64.49 years old, younger than Changchun City. The average size of households is 3.82 in urban areas and 4.32 in rural areas, which indicates the number of households having fewer members has been increasing in urban areas.

Vital Statistics

Table 2 shows birth rate, death rate and natural growth rate in Jilin City. Birth rate increased in 1985, the same as Jilin Province and Changchun City, affected by 1960's baby boom. Fertility by order of

childbirth increased in 1985 due to the "open slightly" policy which has been in effect since 1984.

The natural increase in population was 278 thousand at the time of the 6th 5-year plan (1981 to 1985). Regarding social increase, there was an excess 52,500 outflow due to transfer of enterprises to Yanji.

Situation of Family Planning Project

Table 3 reveals changes in the rate of planned birth in Jilin City. The percentages are high, almost 80%.

Conditions for having a second child in urban areas of Jilin at present are as follows: (1) disabled people suffering from diseases other than non-hereditary, (2) a couple, having been sterile for five years from marriage and obtaining a certificate of sterility from a hospital above the prefectural level, adopted a child and then have a child of their own, (3) when neither husband nor wife has a brother or sister, (4) both husband and wife are living in another country, and (5) a woman who remarries and has not had a child. In rural areas, in addition to the above five conditions, a second child is allowed when all three generations -- grandfather, father and son, have a daughter only.

The family planning programs have been implemented under the nation's leadership and with consideration for public sentiment through free distribution of contraceptives including operations, guidance on eugenic breeding and educational publicity via films, videos and publications. As of June 1987, 641 thousand people practiced birth control, of whom 37.3% underwent sterilization, 53.7% accept the IUD and 9% use the pill or condoms. The percentage of the population using birth control is 87.5%. If contraception fails, abortion is conducted as a substitute, at a rate of 0.43 per childbirth (1986). The number of households having only one child is now 273 thousand (Note 3), of which 210 thousand have a certificate stating "only child". As a future problem, the Jilin municipal family planning commission pointed out reinforcement of a personnel network for disseminating family planning information down to the villagers' association level.

(4) Sanitation Conditions and Problems

1. Changchun

Table 4 provides data on medical organizations and personnel in Changchun. Access to medical organizations seems to be better in urban areas than in the city as a whole. The population covered by one medical organization in the whole city is twice as large as that of

urban areas. Taking population density into account, it is geographically easier to use medical facilities in urban areas.

Health services in urban areas are conducted by local branch sanitation staff (maternal and child health doctor). According to maternal and child health registration records maintained by the staff, regular home visits are made. In villages, a village doctor records pre and post natal information and conducts regular examinations nine times a year.

As for medical checkups on expectant and nursing mothers, a woman approaching maternity visits a designated hospital with a card on which a midwife writes the result of check ups. After leaving the hospital, the mother receives three home visits, on the 12th day, the 28th day and from the 42th to the 56th day, receiving a medical checkup and guidance on childcare, such as nursing.

Medical examinations are conducted three times for 0-1 year-old children, twice per year for 1-2 year-olds and once a year for 3-7 year-olds. Examinations include, testing for rickets, undernourishment, diarrhea and pneumonia, physical measurements and guidance on nutrition.

Since most women work, it is even more important to maintain their health. For them, the following measures are taken: (1) working hours are cut by 30 minutes for seven months from gestation, (2) mothers are permitted to take one hour each morning and afternoon for nursing, (3) testing for women's diseases is conducted once a year.

2. Jilin City

Table 5 contains data on medical organizations and personnel in Jilin. Similar to Changchun, access to medical facilities is better in urban areas. In comparison with Changchun, the medical health standards are a little higher in Jilin City and there is a smaller regional gap between urban and rural areas.

There are four general hospitals in Jilin City. Among special hospitals, maternity clinics have 721 beds in total and children's hospitals have a total of 366 beds. The hospital delivery rate in Jilin City is 100%. The infant mortality in urban areas is 15.2 per 1,000 live births and the neonatal death rate is 13.7. Death rate before or after delivery is 14.7. In rural areas, however, infant mortality is higher, 27 per 1,000 live births. Major factors are divided into two categories, congenital and acquired. Congenital factors are leading causes of neonatal death in the early stages, while later death is caused by infectious diseases or accidents which are relatively easy to prevent. Consequently, efforts are being made to decrease death rate of infants in later stages through infant group examination. Examinations are conducted four times a year for 0 to 1 year-old children, twice a

year for 1 to 3 year olds and once a year for 3 to 6 year olds. Ninety-five percent of the infants are administered triple vaccinations. No children acquire measles and contagious diseases rarely break out.

Emphasis is placed on the following points in taking measures for maternal and child health:

(1) Eugenic breeding in the field of maternal and child health care and sanitation.
(2) Administrative and technical quality improvements
(3) Reinforcement of the system, especially a network of maternal and child health care.
(4) Improvement of health care before and after delivery (from the 28th week of maternity until the 7th day after delivery).

As for (4), special emphasis is placed on medical checkups in the latter stage of maternity. Examinations are conducted at a general hospital in Jilin City and a midwife and a pediatrician attend all hospital deliveries.

To explain the actual conditions of medical care for children in Jilin City, we would like to introduce the Jilin City Children's Hospital visited at this survey as an example.

It is a new hospital, initiating outpatient treatment on December 28, 1986. It was established to (1) control overpopulation, (2) provide health care to children and (3) treat and prevent children's diseases, all to improve the overall quality of the population. The hospital is responsible for 300 thousand children, ages 15 and under, living in Jilin City, and provides health and prevention services. In the future they plan to implement medical research centering on pediatrics as well as educational programs. It has internal medicine, surgery, otolaryngology and Chinese medicine departments, as well as an emergency room. The number of outpatients is 600-700 a day and the number of beds is 103. It employs 52 doctors and 120 staff members but they believe they are understaffed and are currently inviting applications for new positions.

Due to Jilin City's cold weather many patients suffer from respiratory diseases including pneumonia. Moreover, the pollution problem caused by chemical factories located there causes a great deal of concern. Consequently, it is imperative that the city implement measures in the field of preventive medicine and preservation of health. As mentioned above, owing to the high rate of vaccination, immunity to measles and infantile paralysis has been strengthened. Contagious diseases rarely break out thanks to maternal and child health care measures. It is noteworthy that this children's hospital has a child health care department providing immunization, and medical examinations for 0 to 3-year old children (Note 4) and childcare guidance through the

maternal and child health care network for mothers having only one child who is likely to be overnourished. The hospital is fully subsidized by the People's Government of Jilin City. Though patients have to bear medical expenses, they can receive 50% reimbursement by submitting a receipt to their place of employment. As for general medical expenses for children, a 50% subsidy is provide under the Labor Protection Act. Children having a certificate of "only child" (60-80%) can receive special privileges such as preferential medical treatment.

Notes:

(1) National Statistical Bureau, Chinese Statistics Yearbook 1985, Beijing, 1985

(2) The Jilin Province Institute of Family Planning was founded in 1963 by the State Family Planning Commission and the Government of Jilin Province. It is now divided into clinical and research sections, with a 50-member staff. A comparison study on the IUD was conducted as a project under the 6th 5-year plan, which revealed that Copper T was the most acceptable in terms of side effects and contraception.

(3) Of 273 thousand households, 45.1% live in urban areas and 54.9% in rural areas. Since the urban population rate in Jilin City is 29.6%, it is clear that households having only one child account for a larger percentage in urban areas.

(4) Those children three years old and above receive medical checkups at a children's hospital before entering nursery school.

Table 1 Comparison of Living Standards (1985)

	Changchun	Jilin
Diffusion of woterworks (%)	68.2	71.3
Per capita water consumption (ton)	42.2	44.6
Household gas diffusion rate (%)	34.4	38.0
City gas consumption per household (m)	464	-
Propane gas consumption per household (l)	135	58
City gas diffusion rate (%)	21.0	-
Telephone subscriptions per hundred persons	2.8	2.1
Diffusion of public sewage per 10,000 (km)	4.0	1.9
Paved road per 10,000 (m^2)	3.2	2.5
Percentage of parks to the total area (%)	13.1	2.2
Per capita dwelling area (m^2)	5.0	4.6
Annual wage (yuan)		
Works for national business	1,224	1,242
Works for rural business	1,000	1,013
Population (10,000)	160	110

Table 2 Birth Rate, Death Rate and Natural Growth Rate in Jilin City (1981 to 1986)

	1981	1982	1983	1984	1985	1986
Crude birth rate	15.51	17.72	14.70	12.22	14.31	17.11
Crude death rate	6.27	6.17	5.57	5.71	5.62	5.98
Natural growth rate	9.24	11.55	9.13	6.51	8.69	11.13
Total fertility rate	1.63	1.86	1.45	1.24	1.41	1.59
Fertility by order of childbirth						
1st child	70.66	72.39	75.28	78.78	76.50	77.79
2nd child	18.75	21.04	18.86	18.49	19.61	18.87
3rd child	10.59	6.57	5.86	2.73	3.89	3.34

Source: From an interview with Jilin City Family Planning Commission, on 1987 Survey

Table 3 Changes in Rate of Planned Birth in Jilin City (1981 to 1986)

Year	Rate of Planned Birth
1981	72.05
1982	73.13
1983	73.08
1984	77.52
1985	79.51
1986	79.83

Source: Same as Table 2

Table 4 Population per Medical Organization, Bed, and Medical Personnel, 1984, Changchun City

Medical related index	Whole city	Urban areas
Population per sanitation organization	6,448	2,766
Per hospital	25,074	21,538
Per outpatient department	9,786	3,479
Per bed	378	179
Per medical personnel	155	64
Per doctor	207	88

Source: Chinese Statistical Yearbook 1985

Table 5 Population per Medical Organization, Bed, and Medical Personnel, 1984, Jilin City

Medical related index	Whole city	Urban areas
Population per sanitation organization	4,821	2,341
Per hospital	18,869	20,256
Per outpatient department	7,371	2,955
Per bed	287	189
Per medical personnel	148	76
Per doctor	193	99

Source: Chinese Statistical Yearbook 1985

Figure 1: Map of Changchun City

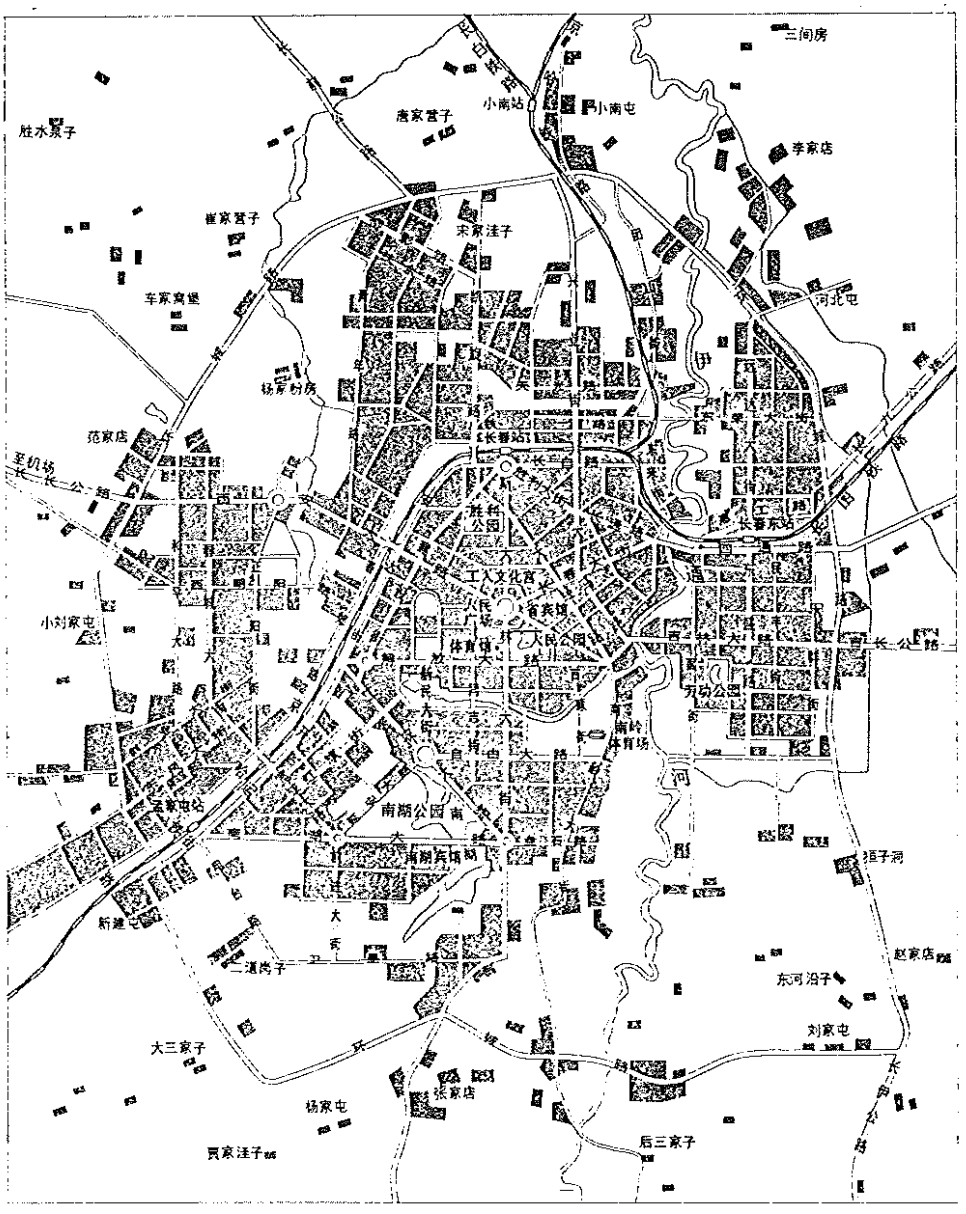


Figure 2: Map of Jilin City

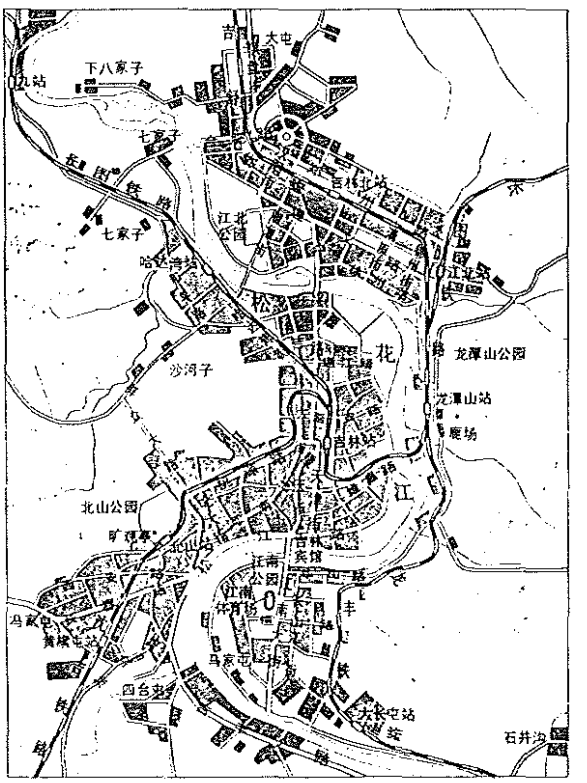
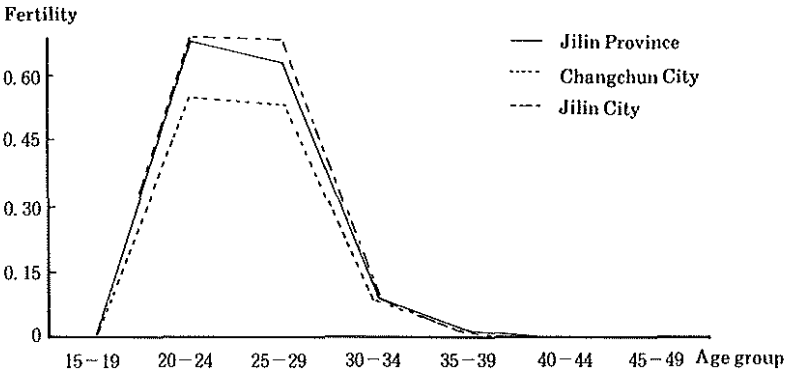
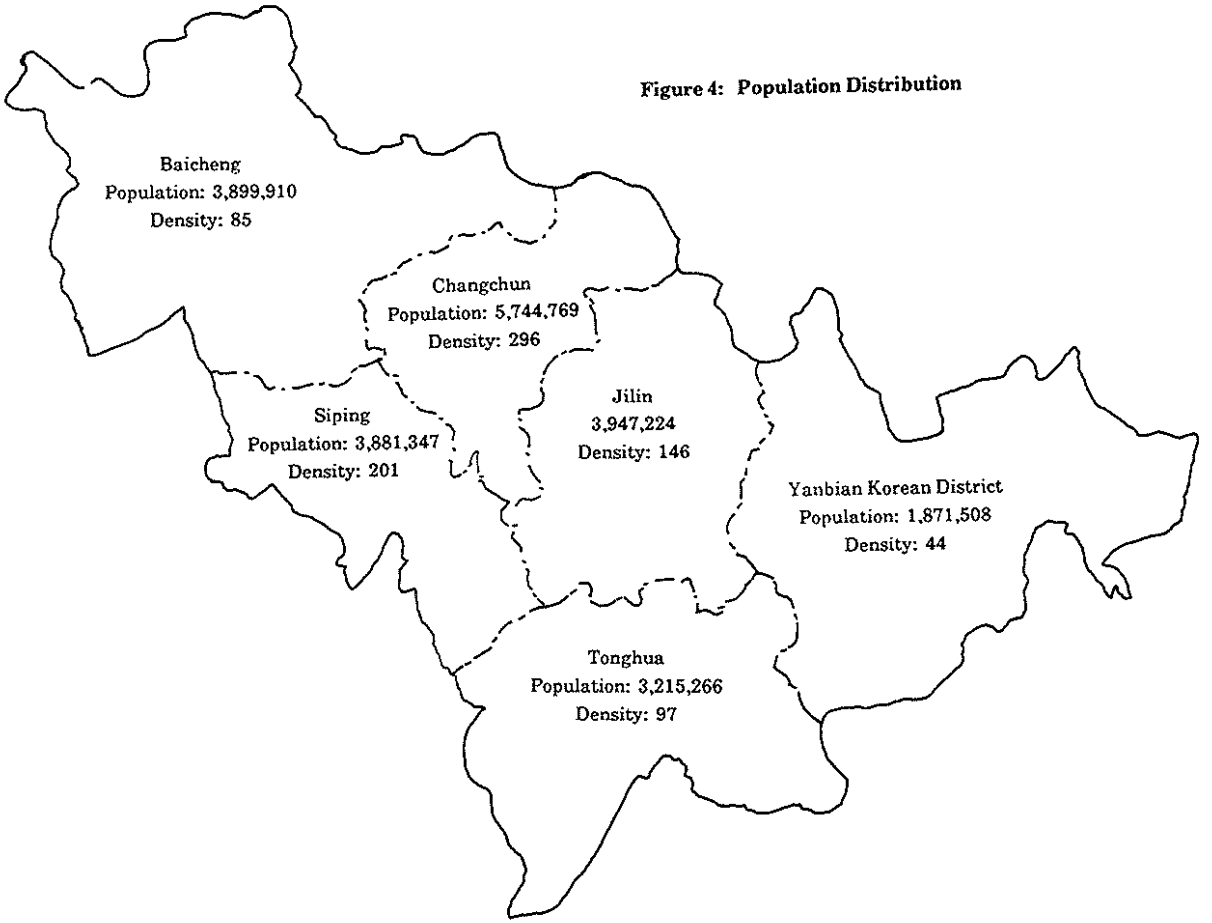


Figure 3: Fertility by Age Group, 1983



Source: Gao Yanan, "Marriage and Family Planning of Jilin Province, 1983" Journal of Population Statistics (Renkou Xuekan): Special Edition of Demography, p. 88 and 90, August 30, 1986

Figure 4: Population Distribution



CHAPTER 7:

POSSIBILITIES OF INTERNATIONAL COOPERATION

It would be useful to comment briefly here on the direction of future international cooperation, or what it should be. These comments will be based on the current China-Japan joint research, which studied the populations and development of the cities of Changchun and Jilin in Jilin province, as well as on other previously conducted studies.

First, the study of demography is a very new field of science in China. Since population problems in China are of vital importance, China is paying serious attention to and has high expectations for the cooperation and assistance in this field provided by advanced countries and international organizations including the United Nations. For instance, China has established population research centers at more than 20 major universities and also Social Science Academys in large cities. In addition, China has sent a lot of professors, experts and young researchers abroad to study, and also invited experts from overseas to do joint research projects and to hold seminars on demographic studies. China has been making remarkable and impressive efforts in this field. At present, however, Japan's cooperation of education and research in the field of population seems to be remarkably imferior in comparison with that of the U.S. The U.S. has been providing large-scale cooperation and assistance, such as accepting many students in demographic studies, and making vigorous joint research projects by inviting Chinese specialists. There are only a few students in the field of demographic studies who have studied or are currently studying at Japanese universities. On the contrary, the U.S. has accepted several hundred students, including those who only stayed for short-term study or training.

Cultural similarities, a long history of cultural exchanges between China and Japan, geographical proximity, and the remarkable development of Japanese science and technology after the World War II have made China's expectations for Japan even higher. Nevertheless, Japan has been substantially lagging behind in providing cooperation for population studies, education, and joint research projects. Japan must expand and strengthen its cooperation and assistance in order to meet China's request based on the Japanese experience and level of study in this field.

Second, the Asian Population and Development Association (Foundation, APDA) has established a new form of international cooperation.

Although the amount of financial assistance has not been large, the cooperation in several different areas of population studies which was provided by the Asian Population and Development Association has set an unprecedented example. China, in particular, has benefitted from this cooperation, which was implemented by APDA at the request of the Japanese government. It is very important to gain the implicit confidence of the country to which assistance is given in order to

achieve the objective of cooperation; such cooperative work processes as close preliminary discussions, joint research projects, and joint analysis of the results with specialists of the country to be studied have made a great contribution toward this goal.

Finally, based on the current situation and past experience stated above, recommendations will be given below as to desirable cooperation and assistance in the field of population study, particularly for China.

1. Sepcial attention should be paid to the mortality differentials between urban and rural districts. In order to conduct experimental studies to improve mortality rate, it would be useful to establish several model centers which would provide public health and medical services particularly in rural areas. The direct cost of establishing these centers should be covered by the Japanese side; a joint research team will be in charge of the operation of the centers. It might be advisable to start the experiment first in Jilin province; positive accomplishments made in Jilin could then be transferred to other provinces.

2. Cooperation should be given in order to improve death statistics. China's general mortality already has been substantially reduced and is at a remarkably low level. However, infnat mortality rates, and the death rates from adult diseases, are still high; thus, joint research projects between China and Japan should be conducted in order to further improve these death statistics.

3. There are still great regional differentials in infant mortality rates, so it would be advisable to conduct joint research in this area. Due attention must be paid to the fact that improvement of the infant mortality rate is strategically essential for the qualitative improvement of the Chinese population and at the same time for effective promotion of the "one-child family policy."

4. Studies on the changes in family structre are recommended as well. The introduction of a new economic system has brought about substantial changes in the Chinese family structure. Particularly in rural areas, a rapid change has been taking place, shifting from farming society to diversification of the family structure in rural China is expected. In addition, the Chinese population is steadily aging. In view of the changes in family structure and increasing urbanization, the support of old people will become a problem of vital importance. The separation of farming households into farmers who are exclusively engaged in agriculture and those who have other sideline businesses was also seen in Japan in the process of its economic development. Therefore, it is especially meaningful to study the current changes in family structure in China in relation to the past Japanese experience.

5. Studies need to be made on urban population and inflow of people to

the cities. Currently, a problem in Chinese cities is the shortage in the work force due to a construction rush on houses, hotels, and factories. Especially, in cities with populations of greater than one million, strict migration control measures are being enforced in order to prevent the negative effects of overpopulation. Thus, the necessary work force has been provided by rural villages as unregistered population. This is basically illegal migration. The unregistered population of Shanghai, for instance, is said to be as large as one or two million. In Changchun and Jilin, unregistered migrants have not yet become a serious problem. However, the local authorities have been paying close attention to this trend as a problem that will need to be studied in the future.

One of China's current vital problems concerns the structure of the urban population, and its development in future in accordance with population size of different categories of cities. In particular, the net inflow or outflow of population in urban districts (the differentials between the emmigration population and the immigration population) is an important variable that needs to be included when making economic and social development plans.

The above brief comment hopefully will provide a guideline for future tasks of the joint research projects with China in the field of population studies.

Finally, it should be stressed that in order to achieve effective cooperation an assistance in the field of population it is vitally important to invite Chinese experts to Japan to discuss common problems with Japanese experts greatly expanding their numbers with longer stay, and facilitating a more accurate understanding of the Japanese experience.

CHAPTER 8:

SURVEY MEMBERS AND ITINERARY

Survey Members

1. Japanese Committee

Dr. Toshio Kuroda (Research Chief)	Director Emeritus, Nihon University Population Research Institute (Head, Field Research Team)
Dr. Hiroaki Washio	Senior Researcher, Economic Cooperation Department, Institute of Developing Economies (Member, Field Research Team)
Dr. Hidesuke Shimizu	Professor of Public Hygiene, School of Medicine, The Jikei University
Ms. Keiko Ono	Research Associate Nihon University Population Research Institute
Mr. Tsuguo Hirose	Secretary General, The Asian Population and Development Association.
Mr. Masaaki Endo	Senior Programme Officer, The Asian Population and Development Association
Ms. Yuiko Nishikawa	Research Staff, The Asian Population and Development Association (Member, Field Research Team)

2. Cooperators

Embassy of Japan in People's Republic of China

Suguru Morimoto	Counselor
Shoji Ashikaga	First Secretary

State Family Planning Commission

Wang Wei	Minister
Xu Qingmei	Deputy Director, Bureau of Foreign Affairs
Peng Zhiliang	Deputy Chief of Office of Policy Research
Wang Xiangying	Deputy Chief of Foreign Affairs Division
Ding Xianming	Office of Foreign Affairs Division

Jilin Provincial Family Planning Commission

Sun Muhan	Deputy Director
Chen Shengli	Deputy Chief, Statician

China Jilin Province Family Planning Association

Wang Ping	Vice President

Jilin Province Office of Public Health

Chang Guizhi	Chief, Division of Mother and Child Welfare

Changchun Municipal People's Government

Li Huizhen	Deputy Mayor
Yang Tianmin	Deputy Secretary General
Zeng Qingxiang	Chief, Foreign Affairs Division
Zhao Bingli	Deputy Chief, Office of Public Health
Qing Shuyuan	Head, Mother and Child Divison
Li Chaochun	Deputy Director, Family Planning Commission
Liu Yaming	Chief Accountant, Family Planning Commission
Ma Li	Family Planning Commission
Chi Xuemin	Family Planning Commission

Jilin Province Institute of Family Planning

Zhou Lianfu	Deputy Director
Dong Jiayou	Chief, Biochemistry Department
Ma Hongliang	Chief, Biology Department

Jilin University

Zhu Riyao	Vice President
Lin Yun	Vice President
Wang Shengjin	Deputy Director, Population Research Institute of Jilin University
Liu Yunde	Deputy Director, Population Research Institute of Jilin University
Qu Haifang	Lecturer, Population Research Institute of Jilin University
Yasuko Hayase	Visiting research fellow, Population Research Institute of Jilin University Chief, Statistics Department, Institute of Developing Economies

Jilin Municipal Family Planning Commission

Wang Zhilang	Chief
Zhang Yunping	Deputy Chief
Pang Fengqing	Head
Zhao Yingli	Supervisor

Jilin Municipal Office of Public Health

Lang yulan	Head, Secretary General of Association for Family Planning

Jilin Municipal Childrens Hospital

Yang Zhongchan	Director, Children's Hospital
Shen Yungbau	Chief of Administrative Division

Survey Itinerary
(July 16 - July 29, 1987)

July 16 (Thu.)	Fly from Narita to Beijing on JL781 (10:00-14:15)
July 17 (Fri.)	Courtesy visit to the Japanese Embassy. Discussion at State Family Planning Commission on survey outline Reception hosted by Minister Wang Wei
July 18 (Sat.)	Fly from Beijing to Changchun
July 19 (Sun.)	Excursion to Changchun City Visit Changchun City free market for interview
July 20 (Mon.)	Lecture and discussion by Deputy Chief of Jilin Province Family Planning Commission on Population dynamics and statistics of Jilin Province and activities of Family Planning Commission
July 21 (Tue.)	Lecture and discussion by Chief of Office of Mother and Child Welfare, Jilin Province office of Public Health on population, diseases and mother and child health in Jilin Province. Briefing by the Staff of the Changchun Municipal People's Government on administrative organization, population, family planning and public health of Changchun City Visit local homes in Changchun City for interview.
July 22 (Wed.)	Visit Jilin Province Institute of Family Planning Briefing and discussion of population related survey at Population Research Institute of Jilin University
July 23 (Thu.)	Move from Changchun City to Jilin City Briefing by the Jilin Municipal Family Planning Commission on administrative organization, population, family planning and public health of Jilin City Visit local homes for interview
July 24 (Fri.)	Visit Jilin Municipal Children's Hospital
July 25 (Sat.)	Move from Jilin City to Changchun City Final meeting with the Jilin Provincial Family Planning Commission
July 26 (Sun.)	Fly from Changchun to Beijing

July 27 (Mon.)	Report to the Japanese Embassy Final discussion and report at State Family Planning Commission
July 28 (Tue.)	Data collection
July 29 (Wed.)	Fly from Beijing to Narita on CA 917 (9:55-13:55)