Growth and Control of Population in China: The Urban-Rural Contrast
Author(s): Mei-Ling Hsu
Source: *Annals of the Association of American Geographers*, Vol. 75, No. 2 (Jun., 1985), pp. 241-257
Published by: Taylor & Francis, Ltd. on behalf of the Association of American Geographers
Stable URL: http://www.jstor.org/stable/2562565
Accessed: 24/03/2009 10:50

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at http://www.jstor.org/page/info/about/policies/terms.jsp. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/action/showPublisher?publisherCode=taylorfrancis.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We work with the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact support@jstor.org.

Association of American Geographers and *Taylor & Francis, Ltd.* are collaborating with JSTOR to digitize, preserve and extend access to *Annals of the Association of American Geographers.*

http://www.jstor.org

Growth and Control of Population in China: The Urban-Rural Contrast

Mei-Ling Hsu

Department of Geography, University of Minnesota, Minneapolis, MN 55455

Abstract. China's population is large and its annual growth significant. Since the mid-1950s, the Chinese government has made four attempts to curb the growth and hopes to limit the total population to 1.2 billion by the year 2000. Thus it has established a policy of limiting families to one child each. These efforts of population control have been successful in cities but have fallen short in rural areas.

Using the 1982 Chinese census and data from a national sampling on fertility, this paper examines the urban-rural contrasts in demographic and marital behavior, rates of growth, and implementation of the one child policy. It discusses the variables, such as education, occupation, and political factors, that affect the urban and rural populations. The majority of rural couples still desire a larger family. The paper probes the reasons for this and finds that the traditional concerns of old age and family propagation are more important than are economic reasons, such as increasing the family labor force. To implement the one child policy local governments have set forth directives against second and higher-order births. They also are promoting the development of small towns and the transference of farmers to nonagricultural jobs. The government is attempting to integrate urban and rural administrations and to establish "population development regions" around the country so that cities can play a central role in population control.

Key Words: population control, China, urban-rural contrasts.

IN 1983 China's population (excluding Taiwan) was 1,025 million, almost one-quarter of the total world population, although the country occupies less than 7 percent of the world's land area (State Statistical Bureau 1984). The growth since 1949 is shown in Figure 1 (Tien 1983); between 1982 and 1983 alone the increase was 9.5 million persons. Because of its size, uneven distribution, enormous annual growth, and history, the population of China has long been of interest to students of world affairs. Like other developing countries, China must curb its continued population growth. The efforts of the current government to do so and to eradicate the differences in growth rates between urban and rural areas are discussed in this paper.

Since the mid-1950s, the Chinese government has made four attempts to curb the rate of population growth. The first two campaigns, which took place during the 1950s and 1960s, had only limited success and were terminated abruptly by political movements: The Great Leap Forward in the late 1950s and the Cultural Revolution of the late 1960s and early 1970s. The third campaign, which was started in the 1970s and later merged into the last campaign, was conducted more quietly and was more successful. The fourth and latest campaign began in 1978 and was announced at a meeting of the Fifth National People's Congress. It has three goals: (1) to make birth control and population planning one of ten tasks of the development of the nation's economy; (2) to reduce the population growth rate to 0.5 percent (from 1.2 percent in 1978) by 1985 and to zero by the year 2000 when the total population should be no more than 1.2 billion; and (3) to achieve the preceding goals by enforcing the birth planning policy of limiting each family to one child—the one child policy (Muhua Chen 1979). Moreover, the 1978 constitution specified that "the state advocates and encourages family planning." Officials also began to stress two equally important tasks for the country: the planning of economic production and the planning of human reproduction. Thus, for the first time in Chinese history a government has

Annals of the Association of American Geographers, 75(2), 1985, pp. 241–257
© Copyright 1985 by Association of American Geographers

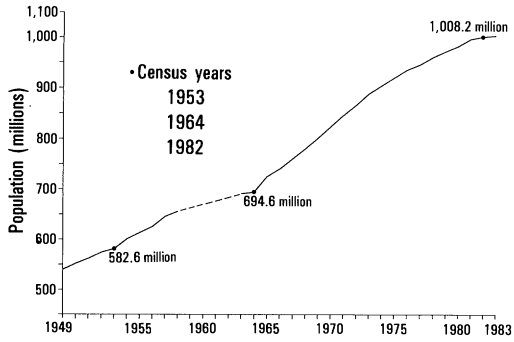

Figure 1. Population of China, 1949–1983.

taken an unequivocal position on population control, a position that goes against the grain of Chinese cultural tradition and that also contradicts the official socialist doctrine held in the early years of the present regime.

The six years that have passed since 1978 are a very short time in the scale of Chinese history, but they are most important to the advancement of demographic studies in China. The 1978 targets were set without benefit of up-to-date census data. The situation was improved greatly in 1982 when the third national census was taken (Aird 1982). A report on a 10 percent sample of the census had been published recently; the bulk of the statistics are, however, still being processed for publication (PRC Population Census Office 1983). Also in 1982, the Chinese undertook a "National One-per-Thousand Population Sample Survey in Birth Rate" (hereafter, "National One-per-Thousand Sample Survey") (Renkou Yu Jingji Editorial Board 1983). The survey data provide several types of careful measurements of the fertility behavior of the female population. For example, by sampling and derivation, the Chinese have worked out the per year *total fertility rate* from 1940 to 1981. This figure is the sum of the age-group fertility rates of women aged 15–49 years. Assuming that the demographic behavior of such women remains the same, we may use the total fertility to approximate the current average number of children per woman of reproductive age. When the census and survey statistics were being analyzed, many new educational and research institutions for demographic studies were being established and new journals published. Consequently, today the Chinese are in a much better position to set up planning targets and to project growth.

The rate of population growth was 1.20 percent in 1978; the 1982 census reports that in 1981 this rate increased to 1.46 percent. To realize the target population of 1.2 billion by the year 2000 means that over the next 18 years (starting from 1982) the total population in China can increase only by 191.8 million, or 10.4 million per year; thus the overall rate of natural increase during this period must be held below 0.95 percent (Table 1) (Xiao and Chen 1983). Yet, during the past 18 years—between 1964, the year of the second census, and 1982—the population increased by 17.4 million per year, an annual rate of 2.1 percent (Qian 1983). (Since the 1970s the death rate has varied from 0.76 percent to 0.62 percent and is not a critical variable in population growth.)

Beyond the apparent implication of these statistics, however, there are more important facts differentiating the past and future 18-year periods. First, the base of the population growth today is much larger than the previous one. Second, two periods of rapid growth occurred, one in the 1950s and another in the 1960s, which have resulted in a surge of female cohorts of reproductive age in the 1980s and beyond. This means that every year about 13 million young females will reach marrying age. This fact, in part, explains the unwelcome jump in the growth rate between 1978 and 1981. If the present fertility rate remains unchanged, by 1993, seven years before the year 2000, China's population

Table 1. Required Growth and Fertility Rates, 1983–2000

Year	Total population (1,000)	Total fertility[a]	Natural growth (percent)
1983	1,027,690	2.30	1.30
1984	1,040,840	2.00	1.15
1985	1,050,710	1.70	1.02
1986	1,061,400	1.67	1.08
1987	1,072,020	1.65	0.96
1988	1,083,510	1.60	1.04
1989	1,095,490	1.55	1.10
1990	1,107,520	1.50	1.10
1991	1,119,080	1.50	1.10
1992	1,130,030	1.50	0.95
1993	1,140,320	1.50	0.94
1994	1,150,380	1.50	0.91
1995	1,159,880	1.50	0.87
1996	1,169,090	1.50	0.82
1997	1,177,180	1.50	0.74
1998	1,184,310	1.50	0.65
1999	1,190,520	1.50	0.56
2000	1,195,920	1.50	0.49

Source: Xiao and Chen (1983, 21).
[a] See text for the definition of total fertility.

will reach 1.2 billion. In order to achieve the goal set by the People's Congress for the year 2000, the total fertility rate must be reduced to 1.7 by 1985 and to 1.5 by 1990 (Table 1). Meanwhile, the government has no choice but to carry out earnestly the one child policy.

As is the case in many other countries, the demographic behavior of those who live in rural areas in China differs from that of urban dwellers. Larger cities have been more successful in reducing the birth rate, controlling population growth, and adhering to the one child policy. With their professional staffs, cities are also in a better position to conduct surveys, collect data, and study various aspects of demographic phenomena and behavior. Urban-rural differences in behavior and policy implementation are examined in this paper. The urban success in and studies of population control should be valuable to rural areas. The analysis of data for urban areas, for example, should provide insight into and explanations of population problems found in rural areas, and records of birth control in urban areas can set standards for rural people. Thus, cities can be expected to play a leading role in aiding the nation's effort at population control and realizing the goal set for the year 2000. The paper also examines resistance in rural areas to the one child policy as well as the approaches taken by officials to combat this resistance. Finally, attention is paid to the formulation of new plans and policies in China to integrate cities and countryside and thus to strengthen the leadership of large cities over surrounding areas in population planning.

The Urban Population

Two important aspects of urban China must be noted. First, there is a great deal of confusion in the definition and demarcation of urban places, and hence, in the meaning of the term "urban population." In 1955, after the publication of the 1953 census, the Chinese State Council issued a set of "Criteria for the Demarcation between Urban and Rural Areas," which define urban places to be: (1) administrative centers at the xian (county) and higher levels; (2) places with 2,000 or more people, at least half of whom are engaged in nonagricultural activities; and (3) places with 1,000 to 2,000 people, at least 75 percent of whom are nonagricultural (Tien 1973, 356–58). It is unclear, however, to what extent these criteria were applied to the 1953 census and to subsequent data collection efforts (Orleans 1982).

In Chinese documents the following terms have been used to designate urban places: dushi (urban), jiaoqu (suburb), shi (municipality), cheng/shi (city), zhen (town), and jizhen (market town). At the top of the urban hierarchy are the three independent municipalities with provincial status: Shanghai, Beijing, and Tianjin. They are followed by smaller municipalities controlled by the provinces which, in turn, are followed by a large number of towns. In statistical reporting, however, usually only two types of places are identified—municipalities (or cities) and towns (Table 2).

Urban places are demarcated by administrative boundaries rather than by any functionally derived borders of urbanization. Most Chinese cities are "overbounded" in that a certain amount of rural land is included in the city jurisdiction. The proportion of rural people to the total population varies from place to place. Large municipalities that sometimes control several xian often include sizable agricultural populations; so do some small xian capitals where subsistence agriculture dominates the landscape (Chang 1976). In the 1982 census,

Table 2. Urban Places and Population in China 1953–82

Year	Number of cities	Number of towns	Total	City population (1,000)	Percent of total population	Urban (city and town) population (1,000)	Percent of total population
1953	164	5,404	5,568	43,523	7.0	77,257	13.2
1964	na	na	na	na	na	127,103	18.4
1978	189	3,261	3,450	112,000	13.0	167,164	20.0
1980	216	3,200	3,416	na	na	na	na
1982	236	2,664	2,900	144,679	14.3	206,589	20.6

Sources: 1964 data derived from the 1982 Census Report ("State Statistical Bureau publishes . . ." 1982); other data from Ma (1983, 207).

these "urban xian" populations were not included in the category of urban data, but in some earlier data collections they had been. This inconsistency presents another source of confusion. In addition, in the past three decades the boundaries of many municipalities were altered, leading to changes in areas and populations. During the late 1950s, for example, many cities, including Beijing and Shanghai, were greatly expanded. In 1973, the city of Tianjin was enlarged to comprise five counties in a territory of 11,000 sq. km. These areal alterations not only increase the extent of overbounded cities but also make it difficult to use urban data for comparative analysis. Some of these statistical problems will be resolved, however, when the detailed report of the 1982 census becomes available.

The second important aspect of urban China is that the country is under-urbanized as compared to the developed and even many developing countries of the world. The 1953 census reported the urban population to be 77.2 million, or 13 percent of China's total population (Table 2). Since then several other figures varying from 11 to 20 percent have been published for different years (Kincannon and Banister 1984). The 1982 census reported the urban population to be 206.6 million, or 20.6 percent of the total population. For most provinces, however, the degree of urbanization was below the national average (Fig. 2) (PRC Population Census Office 1982, 13–15). Despite this low level of urbanization, the total number of inhabitants in urban places is enormous. After all, only three other countries have populations greater than 200 million!

Urbanization increased between 1953 and 1982. In fact between 1953 and 1964, though the total population increased by 19.22 percent, the urban population increased by 64.52 percent; and between 1964 and 1982, total population increased by 45.1 percent and the urban by 62.5

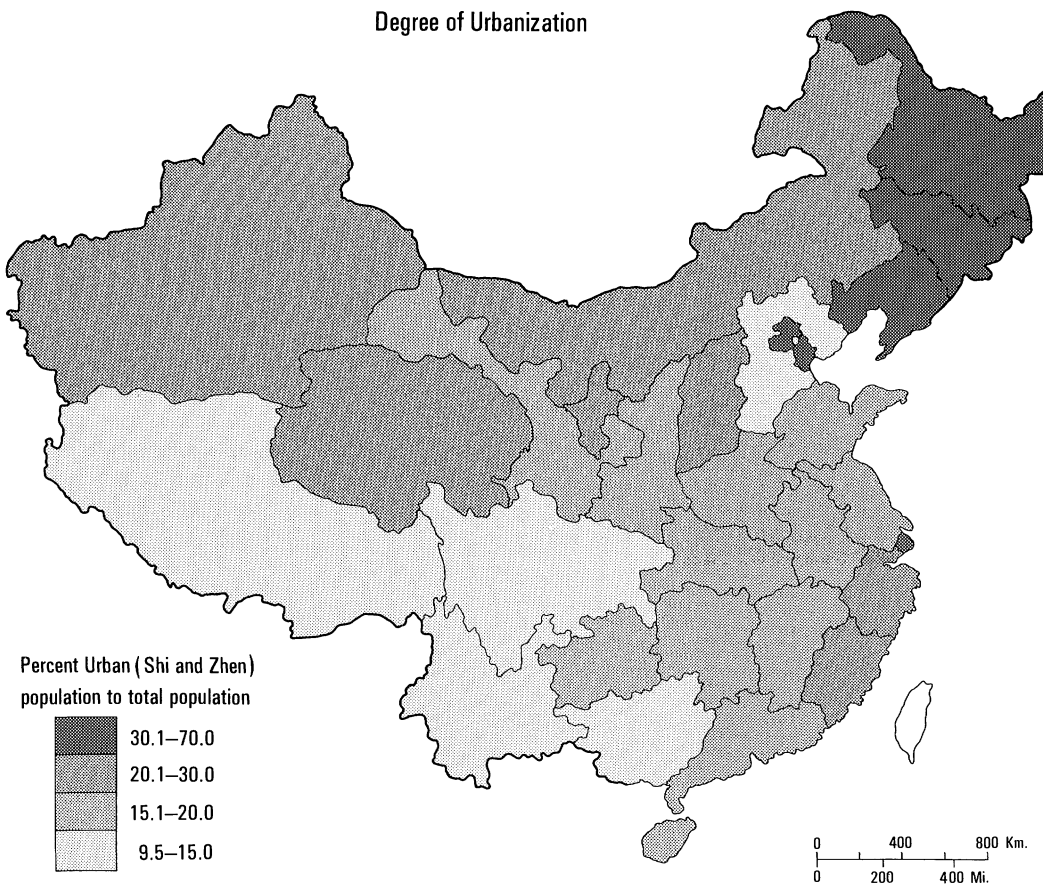

Figure 2a. Degree of urbanization in China, 1982.

percent. In the early-1950s, the rural-to-urban movement was fairly free; cities grew rapidly. Since the mid-1950s, however, national policy has been to restrict urban growth by controlling the rural-to-urban migration and by encouraging the industrialization and growth of small and medium sized cities (Chou and Fan 1980). As a result, in the last three decades, China—unlike many other developing countries—did not encounter an explosive expansion of large cities. Nevertheless, during this time many cities grew and moved from a smaller city-size group to a larger one, as is reflected in Table 3. Thus the number of large cities increased substantially at the expense of smaller ones.

In the remainder of the paper, I examine the demographic behavior of urban versus rural inhabitants and discuss urban growth in this context. It is, however, outside the scope of this paper to examine in detail the growth and spatial pattern of Chinese cities; a good discussion of these topics can be found elsewhere (e.g., Chang 1976, 1981).

Urban-Rural Contrasts in Population Growth

Despite the restriction on rural-to-urban migration, many cities in China expanded substantially because of their net in-migration in the last three decades. In contrast, the fertility of the urban population (and hence the rate of natural growth) was much lower than that of the rural population. The National One-per-Thousand Sample Survey shows that in 1981, for example, the birth rate of the former was 1.45 percent and of the latter, 2.24 percent (Xiao and Chen 1983, 21). Differences are equally evident between the total fertility rates (defined earlier in this paper) of the two populations (Fig. 3) (Xiao, Li, and Wang 1983). Urban fertility rates were lower

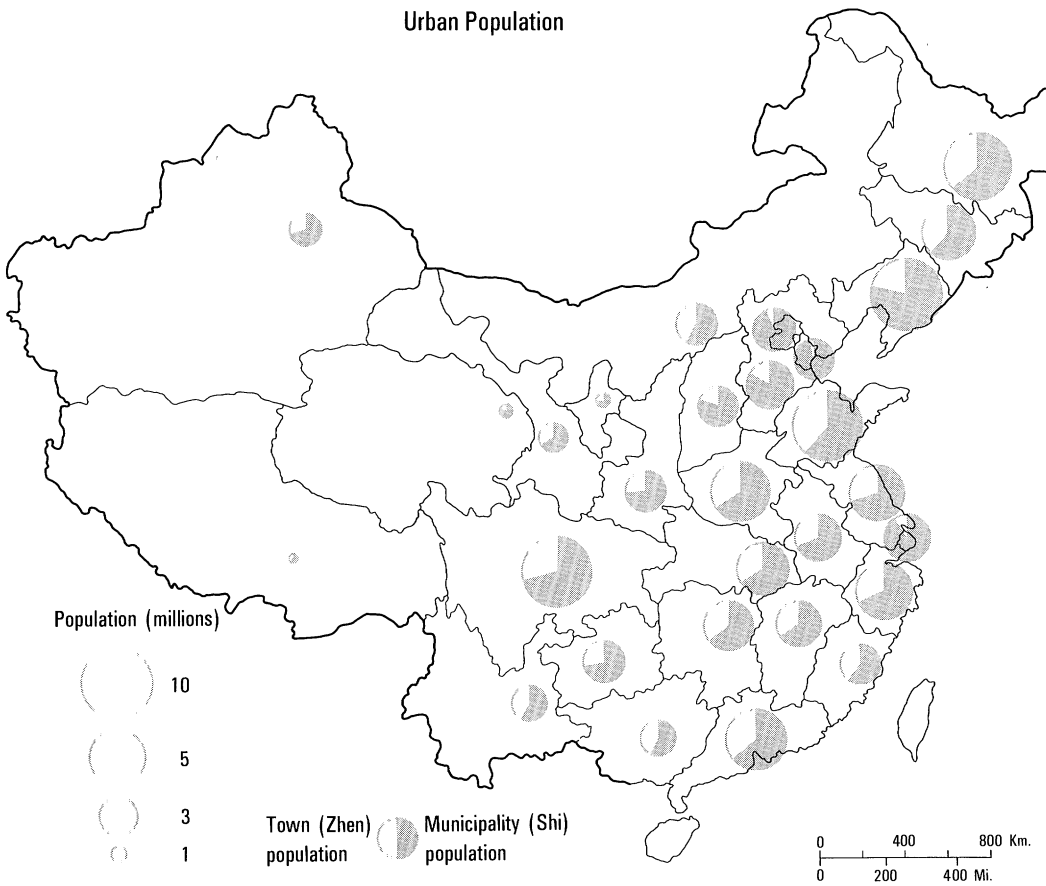

Figure 2b. Urban population in 1982 by province, autonomous region, and independent municipality.

Table 3. Cities by Size, 1953 and 1982

City size	1953		1982	
	Number of cities	Percent of total city population	Number of cities	Percent of total city population
More than 1,000,000	9	40.2	38	52.1
500,000–1,000,000	16	21.3	47	23.0
200,000–500,000	28	16.2	86	19.1
Less than 200,000	113	22.3	65	5.8
Total	166[a]	100.0	236	100.0

Source: Ding (1984, 15).

[a] There is a minor discrepancy between this number and that in Table 2, which records 164 cities in 1953. The tables are based on two different sources.

even during the early-1950s, before the government initiated birth control policies (Shenli Chen 1983). In both urban and rural areas, the high figures before 1958 reflect largely the political stability and economic improvement of the First Five-Year Plan, 1953–57. Between 1959 and 1961 (years of economic disruption and hardship that followed the Great Leap Forward) the number of births declined sharply (Fig. 3). In fact, quite exceptionally, in 1960, the rural total fertility rate (3.99) was slightly below the urban figure. However, all three curves shown in Figure 3 bounced back quickly and reached their peaks in 1963. There followed a brief attempt to curb growth, an attempt that was interrupted by the Cultural Revolution. Fertility rates fluctuated a great deal during the early period of the Cultural Revolution. Since the 1970s, the effort to control births has taken hold, and the people in cities and towns have responded quickly to government policies. In urban places the total fertility rate, which approximates the number of children per female of reproductive age, fell from 5.0 in 1950 to 1.4 in 1981, and in rural areas, from 6.0 to 2.9 in the same period. In 1981, 74.2 percent of urbanites and 68.6 percent of rural dwellers practiced birth control; among those who did not, 12.2 percent (a national average) did not need to because they were, for example, widowed or infertile (Qiu, Wu, and Wang 1983). Finally, Figure 3 also shows two periods of high fertility and rapid growth before 1970.

The urban-rural contrast is manifested again in the varying fertility rates recorded for particular age groups of women during their reproductive years (Shenli Chen 1983, 44). Figure 4 shows the rapid decline of fertility among older women in cities, thereby echoing the decrease in Figure 3. Both graphs reflect the quick response of the city group to the government's efforts to control births after 1965 and in the early 1970s. Figure 4 also records the sudden drop of fertility of all women during two periods: between 1959 and 1961, after the Great Leap Forward, and during the Cultural Revolution, when these women were in their late 20s and mid-30s, respectively.

Several aspects of marriage behavior are known to affect the timing and number of births among women of reproductive age and consequently the rate of natural growth. The Chinese government is aware of these effects. For years it has set a late ideal age for first marriage. In this respect, again, urbanites have been more responsive to the government's urgings. A study based on data collected in the National One-per-Thousand Sample Survey shows that a woman who marries before the age of 18 is considered to marry early; after age 23, she is considered to marry late (Wen and Wei 1983). In urban areas, the percentage of early marriages declined sharply from the peak of 42.4 percent in 1951 to 19.9 percent in 1955 and to 3.1 percent in 1966 (Fig. 5) (Wen and Wei 1983, 127–28). Since 1975 cases of early marriage have been rare, and by 1982 they had almost disappeared in urban areas. Significant progress has also been made among rural inhabitants; yet in 1982, 4.7 percent of all marriages were still early.

Rural women have been less responsive to the government's call to delay marriage. In 1979, 45.3 percent of all rural marriages were late marriages, and in 1982, 38.9 percent. In contrast, the majority of urban women married late: 88.8 percent in 1979 and 81.6 percent in 1982, about twice the rate of their rural counterparts. On the whole, the first marriage of women in cities takes place at an age that is two to three years

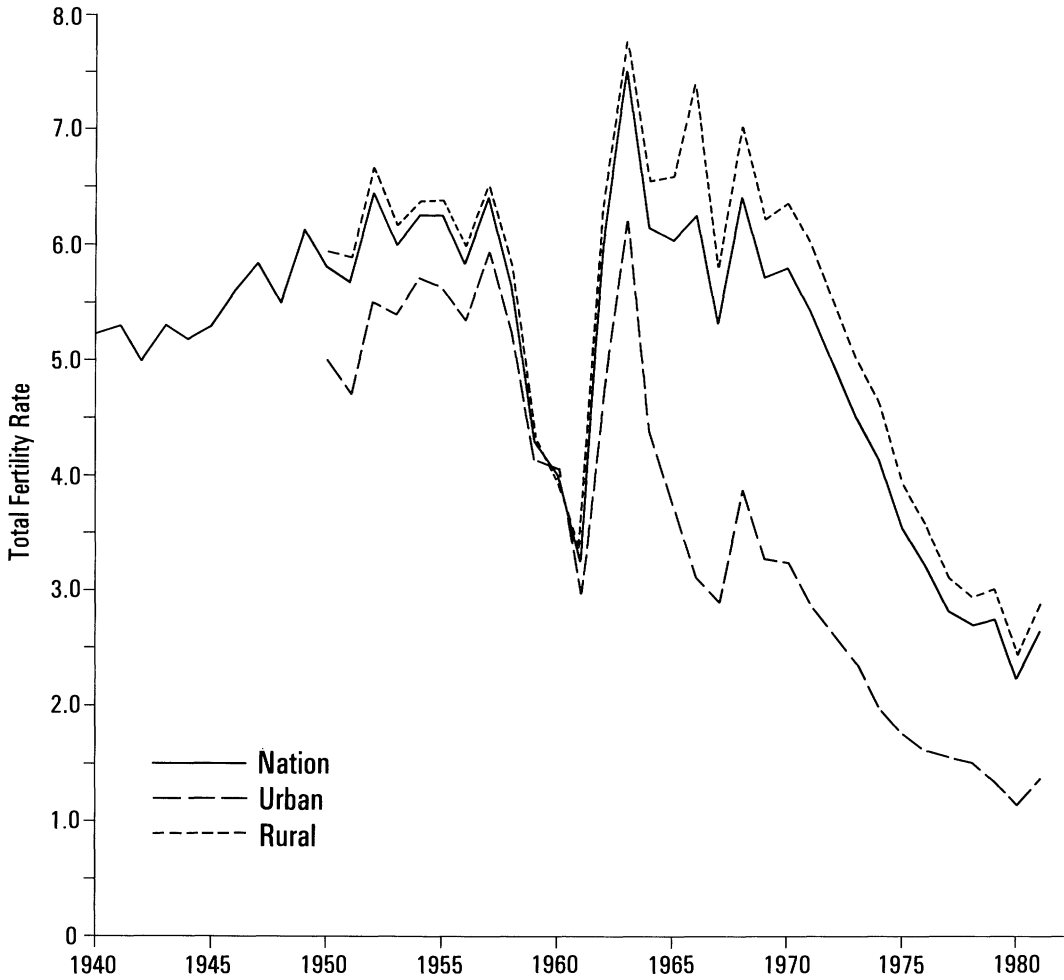

Figure 3. Total fertility rates of urban and rural populations, 1940–81, based on a one-per-thousand national sample.

later than that of women in rural areas. Similarly, the ages at which women have their first and later births are two to three years older for urbanites (Qiao and Xu 1983), indicating that many urban births were postponed or eliminated because of late marriage. Results of regional studies confirm national findings of contrasting marital and fertility behavior in people of urban and rural areas (Feng 1982).

The Implementation of the One Child Policy

Adhering to a one child policy would be difficult in any society in which the norm is a family with two children— a girl and a boy. It is particularly difficult in China where the time-honored tradition is a large family with many sons, who will guarantee good fortune and security for the parents' old age. The policy is also at odds with the common practice of measuring well-being by household rather than by individual income. More children mean a larger labor force in the household and hence a higher income.

In recent years, a responsibility system has been established in rural areas by which farm households sign a contract to gain the use of a piece of land in the people's commune and in return agree to deliver to the government a certain amount of produce; any surplus beyond the set amount may be sold or consumed at will by the farmers. This system has been successful economically, but it has been a mixed blessing at best for the population-control work. First,

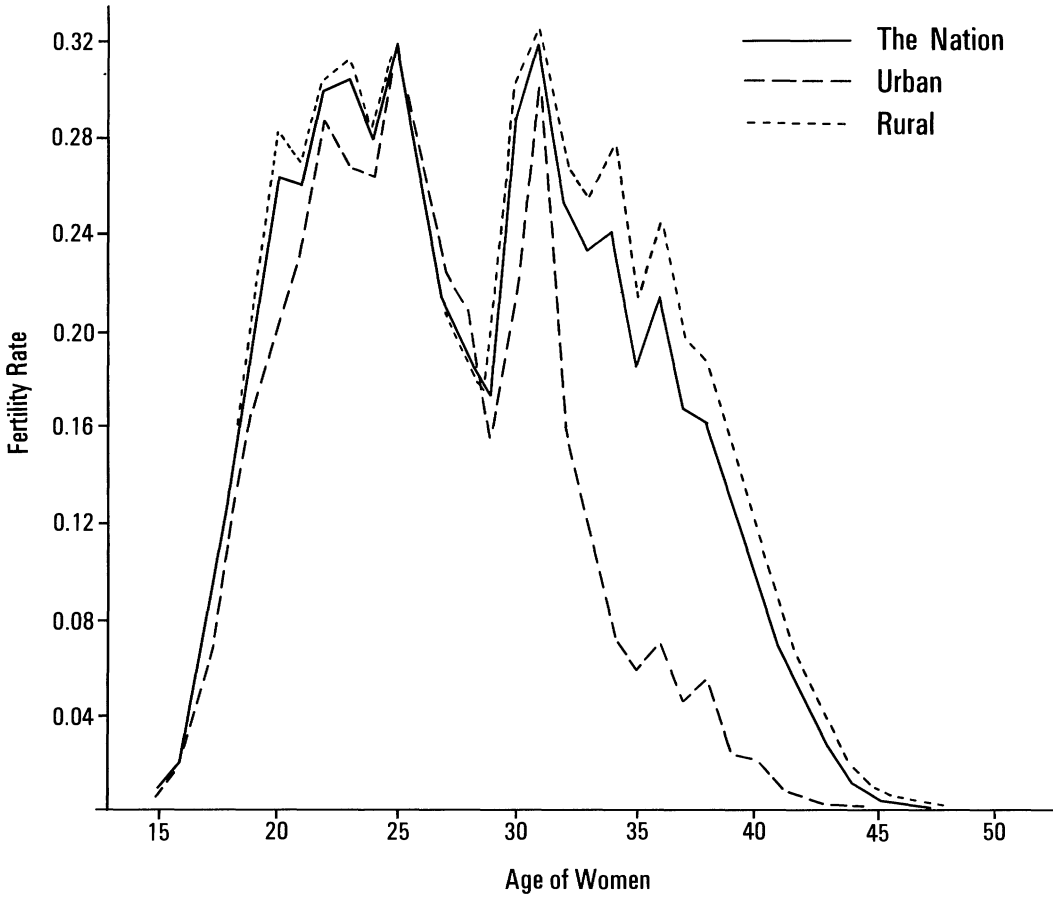

Figure 4. Fertility rates of women of age 50 in 1982, based on a one-per-thousand national sample.

the system is biased toward benefiting families with a larger labor force, and second, because of its success, the system has helped to raise the level of farm income. Consequently, many families are no longer concerned about being punished economically by the authorities for having more children. Finally, many rural cadres have been so busy with economic affairs that they have neglected the work of pushing for the one child policy and improving the old age benefits. Despite these difficulties, it is clear that to achieve the goal set for the year 2000 China has no recourse other than implementing the one child policy.

I consider the one child policy to be not a departure from but rather an extension of the earlier planning policy, "wan, xi, shao," which prevailed in the 1970s; it means "late (marriage), far in between, and fewer" (i.e., fewer children with longer spans in between). Places more likely to succeed in implementing the latest policy are, therefore, those where good progress had been made in birth control in the past and where effective local leadership prevails today. On these grounds cities can be expected to be, and are, more successful than rural areas.

In order to examine the effectiveness of the one child policy, it is important to distinguish order of birth in the statistics. It is also important to study the average number of existing children per woman of reproductive age. In China, since the mid-1970s birth control work has had a significant influence on the number of children borne by younger women (Fig. 6) (Yan and Wang 1983). When the urban-rural comparison is made, two things become clear. First, the birth control activities carried out in urban areas have effectively cut down the percentage of older women having a fourth or fifth child. The rural areas are ten years behind in that women in the 35–39 age group there behave similarly to urban women who are ten years older. Second,

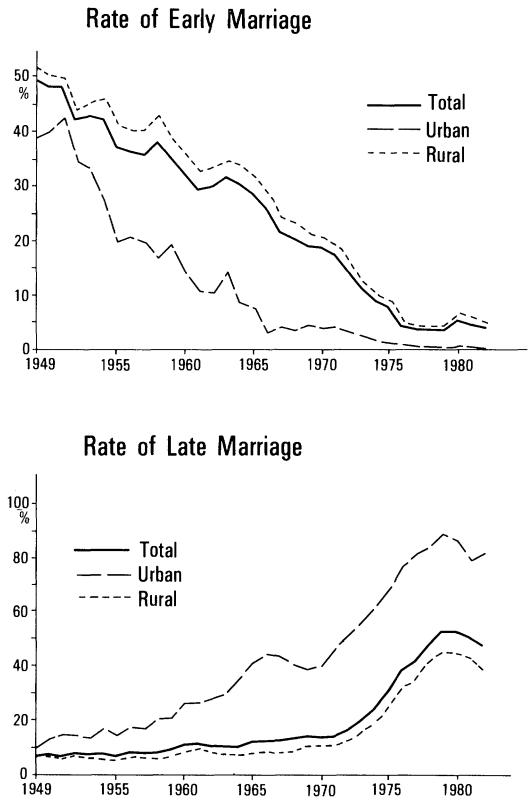

Figure 5. Early and late marriage rates, 1949–82, based on a one-per-thousand national sample.

the control work has restricted most women (63.7 percent) in the youngest group (age 25–29) in urban areas to only one child. This good record is not at all evident in rural areas, where in fact only 34.7 percent of the 25–29 age group had one child, 36.9 percent of them had two children, and 19.8 percent had three or more children. (The remainder had no children).

For the nation as a whole, the population control efforts are also evident in the data on births by order (Fig. 7) (Song, Shi, and Zhang 1983, 57). The 1970 data were largely unaffected by the control work, but the 1977 and 1981 data show its effects. Births beyond the second child declined from 62.2 percent of all births in 1970 to 28.1 percent in 1981. Conversely, the proportion of first births increased from 20.7 percent to 46.6 percent. By 1981, families in cities and towns largely achieved the national goal of one child per family; only a fraction of the total fertility rate represents second and higher orders of birth (Table 4). In rural areas, however, this figure is still higher than that for first births.

The ultimate testimony to the success of the one child policy, of course, is the number of married couples who agree to have a small family and to apply for a one child certificate. Many privileges are given to the holders of this document, but the cost to the government is small in the context of long-term national development. In 1981, 87.9 percent of total births recorded in urban areas were a first child, and 77.6 percent of the one child families were certificate holders. In contrast, in rural areas, these percentages were less than half the urban figures: 42.0 percent and 31.3 percent respectively (Shenli Chen 1983, 45).

Variables Affecting the Rural-Urban Contrasts

It is a common practice in population studies to distinguish urban from rural dwellers. The term "urban population," of course, does not indicate merely where these people live, but also embodies many characteristics commonly shared by city dwellers. For example, occupations in cities are mostly nonagricultural, and a wider range of socioeconomic opportunities and services are provided in cities. Without implying that everyone in urban places is better off, city dwellers tend to be better educated, to earn higher incomes, and to produce a nation's leaders. This is particularly true in China where relatively few people have received higher education.

The better-educated Chinese urbanites are more receptive to new ideas and changes and are more likely to alter their traditional sense of values. Their demographic behavior has been shown to differ from that of rural people. Moreover, larger cities in China offer much better social and medical services, which are critical to birth control and infant mortality. Thus cities are in a better position to implement the one child policy. Existing data are inadequate to carry out a more rigorous statistical analysis (e.g., a multiple regression) to search for reasons underlying the urban-rural contrasts. Some cause-effect relations can be sorted out, however, by comparing some socioeconomic data with demographic records.

When women of reproductive age are grouped by levels of education and their average number of children, the negative correlation between the two variables is revealed (Table 5). Better edu-

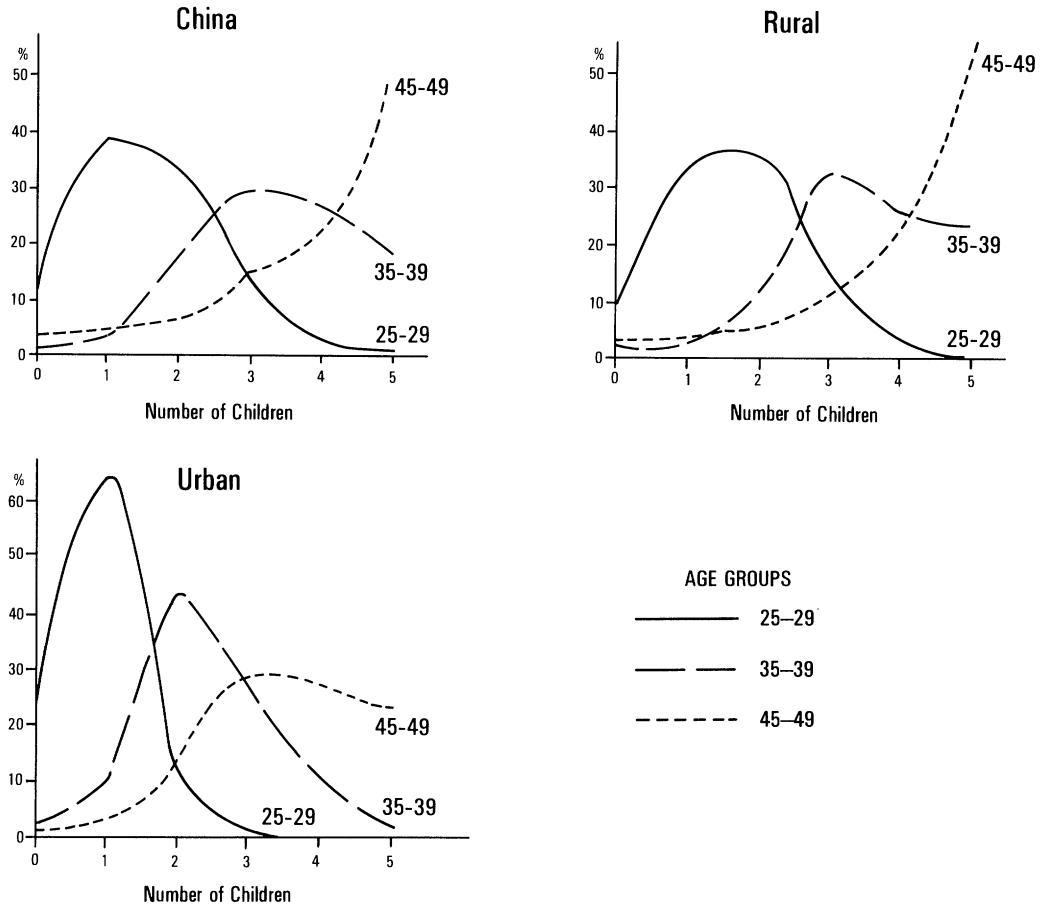

Figure 6. Average number of children of married women of reproductive age, based on a one-per-thousand national sample.

cated women have also been found to marry later and to be more knowledgeable about birth control methods (Shenli Chen 1983, 43). It is interesting to note that, at least in this sample study, within each educational group the rural setting is related to a higher level of fertility. In other studies, however, the results have been more definitive in relating education to fertility without the noticeable effect of the "rural factor" (Beijing Family Planning Commission 1983). Not surprisingly, occupation is also important in affecting women's fertility (Table 6). Cadres (officials) have the lowest fertility, and both cadres and factory workers are lower in fertility than are farmers. Here the urban-rural division is not as strong a determinant as occupation is. Specifically, the cadres in both urban and rural areas have the lowest fertility, and the workers in rural areas behave more like their city counterparts than their neighboring farmers (Table 7).

For a particular city or xian (county) to implement the population planning policy successfully depends on many factors in addition to education and occupation. Always important in the Chinese context are political factors such as the effectiveness of the local leadership and the nature of retirement and old age benefits that may encourage people to have only one child. Ultimately good results in policy implementation depend on the persistent effort of local officials to reach out to every household and to educate people to the need for limiting family size.

Presently in China within each profession and each work place there usually is an internal communication network. Much of the implementation of population policies can use and has used these networks. This undertaking has also been more successful in cities than in rural areas, in part because urban work places such as agencies or factories are better organized for internal communication than are the more dispersed op-

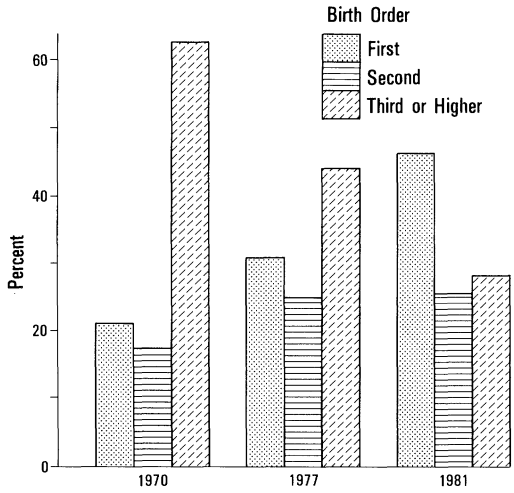

Figure 7. Births by order, in the years 1970, 1977, and 1981, based on a one-per-thousand national sample.

erations in rural areas. Moreover, the rural responsibility system, which is designed for small scale operations of one family or a group of families, creates new problems in communication. Finally, level of education is critical in communication, and both the populace and the local cadres in cities are better educated.

China's Population Problem Areas—The Countryside

Given the contrast between urban and rural performances in population control, an analysis of the difficulties confronted in rural areas is in order (Li 1982). The roots of today's demographic behavior among the rural populace are complex; they are cultural and historical, affected by the socioeconomic conditions of the recent past, and shaped by laws and policies. On the one hand, rural residents, being less educated and mostly farmers, are bound to traditional views and needs and are resistant to population planning. On the other hand, these people proved to be quick in response to certain policies, for example, the responsibility system and the new marital law that took effect in 1981. The latter lowered the minimum age allowed for the first marriage; many citizens took this law to be a sign of leniency, and consequently there has been a surge in the number of early marriages. Nevertheless, we can try to answer the question of why rural people continue to resist the one child policy by analyzing the findings of a number of regional studies.

In 1981, Shaanxi Province had a birth rate of 2.04 percent and a death rate of 0.71 percent; yet there was a noticeable trend of increasing fertility. Thus a study was conducted in the northern, central, and southern parts of the province (each of which has different geographical characteristics) in order to investigate the reasons for second births (Zhao and Zhu 1983). The data used here were not broken down by geographical areas, however. A sample of 932 was taken, of which 87 percent were rural families. The reason given by the majority (50.5 percent) was that they wanted a son; 38.6 percent, many of whom already had a son, said that they wanted a second child (without specifying the sex) or a daughter; and 10.6 percent gave other reasons, only 3.6 percent of whom admitted failure in birth control practice. Those who wanted sons gave the following reasons: for their old age (27.5 percent), for family propagation (13.9 percent), and for additional labor (9.1 percent). This clearly disputes the validity of the common belief that farmers want more sons simply to increase the labor supply.

More revealing answers were given when the

Table 4. Total Fertility Rate by Order of Birth, 1980 and 1981[a]

	Order of births	Total population	City and town population	Rural population
1980	First	0.869	0.833	0.893
	Second	0.564	0.261	0.630
	Third and higher	0.805	0.053	0.957
	Sum	2.238	1.147	2.480
1981	First	1.162	1.196	1.177
	Second	0.624	0.162	0.728
	Third and higher	0.845	0.032	1.005
	Sum	2.631	1.390	2.910

Source: Xiao, Li, and Wang (1983, 55); based on a one-per-thousand national sample.
[a] The term total fertility rate is defined in the text.

Table 5. Average Number of Children Born to Women Aged 35–49 By Different Levels of Education, 1981

Education level	In rural areas		In cities and towns		All women	
	Sample size	Average number of children	Sample size	Average number of children	Sample size	Average number of children
All women	12,860	4.44	2,705	2.92	15,565	4.18
Illiterate	7,935	4.78	391	3.97	8,326	4.47
Elementary	4,029	3.99	1,071	3.14	5,100	3.81
Junior high	722	3.52	701	2.60	1,473	3.08
Senior high	115	3.17	427	2.21	542	2.41
College	9	2.22	115	1.92	124	1.94

Source: Zhao and Sun (1983, 82); based on a one-per-thousand national sample of three age groups: 35–39, 40–44, and 45–49.

subjects were asked if they regretted having the unplanned birth, which inevitably resulted in some government penalties that brought a loss of income and benefits. The majority (54.8 percent) said that they were sorry about the penalty but not about having a second child, and 17 percent were willing to take the consequences for the sake of realizing their wishes. However, many (21 percent) also regretted receiving the penalty although they did not get what they wished (presumably, a child of the desired sex). Only 7.2 percent of the families, the majority of whom were urbanites, said that because of the excess birth they felt social pressure. Those who had no regret felt that (1) they could raise their child without adding to the government's burden; (2) their family income and well-being would not suffer; (3) they had not felt any social pressure; and (4) their child would be more filial when he/she learned about the parents' penalties and sufferings, a culturally rooted form of reasoning.

There is no apparent correlation between a household's income and having a second child; however, 89.5 percent of those surveyed had an education level below junior high school, including the 12.3 percent who were illiterate. The findings also reflect another factor. The success of the rural responsibility system has brought a rise of farm income in recent years. This has had an unintended effect on the population planning work, however; today many farmers feel that they can afford the economic penalties and can raise more children on their own.

A sample survey was also conducted in the rural areas of five xian in southern Hubei Province, which include lowlands and some hilly areas to the west (Cheng 1982). In this area, currently each married woman of reproductive age averaged (or will have) 3.36 births, of which 2.66 survived (or will survive). When asked how many children the sample subjects desired, the respective percentages of families wanting one child to four children were 5, 51, 28, and 15. In the hilly areas, which are less developed, 72 percent wanted three to four children! The families' reasons for wanting more children were to help out in old age and to propagate the family (76 percent), to enjoy having children around (3 percent), and to increase the labor force (21 per-

Table 6. Average Number of Children Born to Women Aged 35–67 in Different Occupations, 1981

	All women		In cities and towns		In rural areas	
	Sample size	Average number of children	Sample size	Average number of children	Sample size	Average number of children
All women	28,556	4.78	4,991	3.64	23,565	5.03
Farmers	22,996	5.04	—	—	22,966	5.04
Workers	3,232	3.56	3,022	3.53	210	4.03
Cadres (officials)	906	2.69	760	2.58	146	3.26
Other	1,452	4.76	1,209	4.60	243	5.55

Source: Li and Zhang (1983, 84); based on a one-per-thousand national sample of women in age groups 35–67 (five-year intervals, the oldest group is 65–67).

Table 7. Average Number of Children Born to Women by Occupation and Place of Residence

	Average number of children		
	In cities and towns	In rural areas	Rural-urban difference
Workers	3.53	4.03	+0.50
Cadres (officials)	2.58	3.26	+0.68
Worker-cadre difference	+0.95	+0.77	

Source: Li and Zhang (1983, 84); based on a one-per-thousand national sample of women in age groups 35–67 (five-year intervals, the oldest group is 65–67).

cent). The survey also included a study of young women who were just under marriageable age. It showed that the majority (83 percent) would like to have two children and only 14 percent would be satisfied with one child.

Qiyi (July 1st) People's Commune outside the city of Shanghai is a progressive commune and a showplace for foreign visitors. In 1979, its birth rate was 1.64 percent and its natural growth rate, 1.08 percent (Gao and Gu 1982). Nevertheless, when it was surveyed in 1980, an overwhelming 84 percent of women of reproductive age said the ideal number of children per family was two. For those who already had one child, 78.1 percent wanted another. Most women preferred two children, a boy and a girl. To be sure, if a study of this kind had been conducted in the 1940s or 1950s, the answer probably would have been four children with three sons. Progress has been made. All these studies reveal, however, the strong desire of the rural population in the 1980s for at least two children; here lies the fundamental obstacle to implementing the one child policy.

Combatting the Rural Resistance to the One Child Policy

Today the population planners in China are troubled by two recent trends: (1) the reversal or slowing down of the decline of the fertility rate in recent years because a large number of young people have reached marriage age, because the number of early marriages has increased, and because farm incomes have risen; and (2) particularly in rural areas, the strength of the resistance to the one child policy. (Note even for women who will have only one child, the individual's effort of delaying the marriage and birth of the child will help the nation to keep the annual births to a smaller number and the total population under 1.2 billion). In order to keep the total population below 1.2 billion by the year 2000 great effort must be made to combat these trends. Thus the latest actions in population planning emphasize three basic points.

First, through education and propaganda, disseminate information on birth control methods and eugenic principles and explain to the populace the negative correlation between growth and the socioeconomic well-being of the population (Du and Yuan 1983; Lu 1982; People's Government of Rong-cheng County 1982; Propaganda Department 1983). As the majority of the Chinese population is still agricultural, it is important to inform the farmers about the decline since the 1950s of arable land per capita. Farmers are also told that the average income per capita in rural areas is affected by the increase of population.

Second, require local leaders to work closely with population workers and ask both groups to be dedicated and persistent in carrying out their tasks. To eliminate, or at least to reduce, the number of second children being born the population workers are asked to practice "zhua zao, zhua xi, zhua shi," meaning, "catch them early (i.e., anticipate and prevent the excess births), work meticulously (e.g., in education and propaganda work and in keeping up-to-date fertility records of each married woman within the administrative unit), and do the job thoroughly (e.g., eliminate the excess births, grant privileges to the one child families, and impose penalties on larger families)" (Fan 1982; Hu 1983; Liu 1983).

Third, call for emphasis on two productions (liang chong sheng chan); that is, give equal attention to both economic production and population reproduction. As the agricultural responsibility system has been adopted, a parallel "population responsibility" mechanism must also be established independently or as a part of the agricultural contract (He et al. 1982; Xu 1982; Zhu 1982). Rural people must be held accountable in birth control as well as in economic production; failing to do so, they will be penalized.

One important factor that contributes to the success of population planning in cities is a good retirement system; urbanites are more assured of support in their old age. In contrast, in rural

areas, the care of the old has been largely a family affair. For the elderly who have no children, limited benefits and facilities are available. Retirement systems exist in only a few rural areas. When a new one is being established, it often is treated as a news item and is well publicized. Much remains to be done to meet the needs of the elderly. Of late, this problem has often been discussed among officials and scholars, but little concrete action has been taken to remedy it; cost constitutes one of the major difficulties (Xu 1982; Zhou 1983). There is no dispute among the concerned individuals, however, that a well-developed retirement and old-age benefit system is essential to the success of the one child policy.

Concluding Remarks

Obviously, China's population problems cannot be solved by letting rural residents migrate freely to cities. Three important recent events also must be noted. They are (1) the existence of a special type of urbanization, (2) the promotion of small towns, and (3) the formulation of population-planning regions. Two of the events are not demographic per se, but certainly all three will have a definite effect on population planning. Within the planning regions, cities will play a leading role in population control over urban as well as rural areas. The development of small towns will facilitate the process of urbanization of the huge Chinese rural population and will reduce the migratory flow of people to large cities. These events are elaborated upon below.

Urban places in China are successfully controlling their natural growth because they have many advantages over rural areas in education, occupational structure, health care, welfare for the elderly, communication networks, local leadership, and so on. However, cities are not without population-related problems. There are difficulties in the provision of employment, schools, housing, and transportation, and serious cases of land abuse and environmental deterioration can be found. These problems are more acute in larger centers. City officials are concerned with their inability to plan for growth resulting from net immigration (Gu 1982; Hu and Yan 1983; Wang 1982) and would be pleased to see even more restrictions placed on rural-to-urban migration. Clearly the larger cities, which are most attractive to potential immigrants, provide no haven for the agricultural overpopulation. Thus current government policy is to restrict the growth of large cities, to develop medium-sized cities, and actively to promote small towns. More about this promotion is said later.

There is a special form of urbanization of the rural population in China (Yao and Wu 1982). Years of effort in the diversification of the rural economy have yielded a significant number of people who are both "workers and peasants." Generally, they live in rural areas and work in the local factories, live in rural areas and do industrial work during periods of light agricultural activities (they actually spend more time per year on nonagricultural work), or they live in rural areas but commute daily to work in towns. In the first two situations the factories are owned by local organizations or by local (xiang) governments. It was estimated that in 1979 there were 30 million such worker-peasants, which was about 9.7 percent of the rural labor force, or 3 percent of the total Chinese population. Today this figure and the percentages should be much higher. In rich rural areas like Wuxi Xian and Wu Xian (counties) in Jiangsu Province, these people constituted as much as 25 percent of the labor force (Yao and Wu 1982, 158). Today they commute to small towns to work; tomorrow, however, they are likely to be in-migrants to the nearby towns. This certainly is an inexpensive and painless way to urbanize the rural population and is an ideal means of transferring surplus labor out of rural areas. Of course, ultimately this transfer is necessary if China is to become modernized. As was recently proclaimed by one Chinese official, China plans to shift 30–40 percent of her agricultural labor force into manufacturing and service industries, primarily in small towns (O'Callaghan 1984).

A recent article in the *People's Daily* strongly promoted the development of small towns, which, it was said, include small municipalities, satellite towns, industrial and mining districts, xian seats, administrative towns, and centers (or seats) of communes and xiang (lowest level of government) ("Speed up the pace . . ." 1984). Accordingly, there are more than 2,000 (actually, 2,133 in 1982) xian seats, over 1,100 administrative towns, and over 54,000 xiang and commune centers. They are scattered around the country and can be (and some have been) developed into

cultural, socioeconomic and political centers, as well as growth poles for the surrounding rural areas. They can also serve as bridges between the contrasting large cities and farming regions. More important, they can be the intervening points (on a more permanent basis) along the migration flow from rural to large urban places. As such they can regulate the rural-urban population imbalance and absorb the surplus rural labor force. For this reason they were referred to as "reservoirs" in the *People's Daily* article. Of course, under this scheme, the government would relax regulations so that farmers could freely move into nearby towns. Meanwhile, the number of villagers who commute to towns to work is likely to increase fairly rapidly. It has been reported that currently over 10,000 peasants in Bixi, a xiang within Changshu City, Jiangsu Province, travel daily to town to work ("Bixi Xiang develops industries . . ." 1984).

Another recent event also points to the increase of urban-rural interaction, which gives cities a more direct influence over the countryside. The authority of Jiangsu Province has abolished the "district," an interim administrative unit between the province and the xian. Today, the administration of the 63 xian in Jiangsu is assigned to 11 municipality governments ("Eleven cities in Jiangsu . . ." 1983). This change was made to generate a closer tie between the xian (counties) and the central cities and to stimulate economic growth within city-xian region. Although no specific mention was made in the news article of population planning, we can speculate that within each region the rural areas will be pressed to be more responsive to the one child policy.

Finally, a conference was held in March 1983 by the State Family Planning Commission for the purpose of drawing up "population development regions" in China (Zhao 1983). This work was to be completed within 18 months to two years. It is unclear whether criteria were set to carry out this regionalization; but it was said that once demarcated, each region should assess its physical resources and socioeconomic conditions and derive the ideal population size that the locale could support. Thereafter the planning work should aim at realizing this ideal size and at defining the limits of population for the years 2000, 2025, 2050, and so on. This regional concept would be tested first in Shandong and Hunan Provinces and in Xinjiang Autonomous Region. The report was very brief, however, and left many questions unanswered. Of course, such regions will be meaningful only if they are economic-population development regions, in which cities are the growth poles and play a central role in population planning.

References

Aird, John S. 1982. Recent demographic data from China: Problems and prospects. *China under the four modernizations,* part 1, pp. 171–223. Report prepared for the Joint Economic Committee, U.S. Congress.

Beijing Family Planning Commission and Institute of Population Theory Research, People's University of China. 1983. Dynamics of women's marriage and fertility in Beijing. *Renkou Yanjiu* 1:33–42.

Bixi Xiang develops industries and agricultural-sideline industries and builds a new type of market town. 1984. *People's Daily* (Beijing), 25 February, p. 1.

Chang, Sen-dou. 1976. The changing system of Chinese cities. *Annals of the Association of American Geographers* 66:398–415.

———. 1981. Modernization and China's urban development. *Annals of the Association of American Geographers* 71:202–19.

Chen, Muhua. 1979. To realize the four modernizations a planned control of population growth is required. *People's Daily* (Beijing), 11 August, p. 2.

Chen, Shenli. 1983. Women's fertility in forty-two years from 1940 to 1981. In *An analysis of a national one-per-thousand population sample survey in birth rate.* (Special Issue of the *Renkou Yu Jingji,* July), pp. 30–51.

Cheng, Du. 1982. Fertility survey in the rural area of Hubei Province. *Renkou Yanjiu* 5:36–38, 31.

Chou, Weizhi, and Fan, Chunyong. 1980. A review of the change of Beijing's population growth and perspectives on its development. *Renkou Yu Jingji* 3:1–4.

Ding, Yisheng. 1984. The urban and rural distribution of China's population. *Renkou Yanjiu* 4:14–17.

Du, Shiwei, and Yuan, Zhenxiang. 1983. A gold key to initiate a new situation in family planning work. *Renkou Yanjiu* 3:49–53.

Eleven cities in Jiangsu implement the system of city directing xian. 1983. *People's Daily* (Beijing), 2 January, p. 1.

Fan, Zhe. 1982. To grasp the family planning program early, carefully and surely according to the law of reproduction. *Renkou Yanjiu* 6:48–49.

Feng, Zhonghui. 1982. The situation of childbearing women's marriage and birth in Shaanxi Province. *Renkou Yanjiu* 2:37–40.

Gao, Ersheng, and Gu, Xingyuan. 1982. A cohort analysis of the fertility of the 'July First' People's Commune in Shanghai County. *Renkou Yanjiu* 3:42–46, 59.

Gu, Yaode. 1982. A tentative discussion on population control in Hangzhou and orientation of its development. *Renkou Yanjiu* 4:30–33.

He, Kuoquan; Zhang, Zhiyou; Liu, Rao; and Zhu, Xiuying. 1982. What should be focused on rural family planning judged by the population survey in Huei Yuan County. *Renkou Yanjiu* 2:48–49.

Hu, Fangrong. 1983. The experience of organizing the permanent work team for family planning in Wuqishan Commune, Taojiang County, Hunan. *Renkou Yanjiu* 4:44–45, 63.

Hu, Huanyong, and Yan, Zhenyuan. 1983. The Shanghai municipality scheme—too many people in limited area. In *Articles on population research,* vol. 2, ed. Huanyong Hu, pp. 58–64. Shanghai: Huadong Normal University Press.

Kincannon, Louis, and Banister, Judith. 1984. Perspectives on China's 1982 census. Paper presented to the International Seminar on China's 1982 Population Census, March 26–31, Beijing, China.

Li, Muzhen. 1982. China's population problems focus on the countryside. *Renkou Yu Jingji* 6:3–7.

Li, Xingyuan, and Zhang, Zehong. 1983. Occupation and fertility level of women of reproductive age. Special Issue of the *Renkou Yu Jingji,* July, pp. 83–85.

Liu, Xun. 1983. The fundamental state policy points out a new way, keeping the work of contraception and sterilization continuously. *Renkou Yanjiu* 4:46–48.

Lu, Luhua. 1982. Emphasizing population education, implementing measures to the birth control and carrying out family planning in a good way. *Renkou Yanjiu* 4:45–46.

Ma, Laurence J. C. 1983. Preliminary results of the 1982 census in China. *Geographical Review* 73:198–210.

O'Callaghan, Mary-Louis. 1984. China plans to shift nearly half its rural workers to industry. *Christian Science Monitor,* 3 April, pp. 9–10.

Orleans, Leo A. 1982. China's urban population: Concepts, conglomerations, and concerns. *China under the four modernizations,* part 1, pp. 268–302. Report prepared for the Joint Economic Committee, U.S. Congress.

People's Government of Rong-cheng County, Shandong Province. 1982. To develop the family planning work deeply through following the working method of 'taking three as the keys.' *Renkou Yanjiu* 6:24–26.

People's Republic of China. State Council Population Census Office and State Statistical Bureau, Department of Population Statistics (PRC Population Census Office). 1982. *Major figures from the third Chinese population census.* Beijing.

People's Republic of China. State Council Population Census Office and State Statistical Bureau, Department of Population Statistics (PRC Population Census Office). 1983. *Major figures from the ten percent sample tabulation of China's 1982 population census.* Beijing.

PRC Population Census Office. *See* People's Republic of China. State Council Population Census Office and State Statistical Bureau, Department of Population Statistics.

The Propaganda Department of the Party's Central Committee and Other 8 Units. 1983. The spirit of the 12th Party Congress, following the main propaganda points of further controlling the population increase. *Renkou Yanjiu* 1:1–4.

Qian, Xinzhong. 1983. The research of population theory must be integrated with China's reality—a speech delivered at the Population Theory Symposium in Commemoration of the 100th Anniversary of the Passing Away of Karl Marx. *Renkou Yanjiu* 3:4–5, 15.

Qiao, Bin, and Xu, Datong. 1983. The distribution of women's birth-order interval. Special Issue of the *Renkou Yu Jingji,* July, pp. 62–63.

Qiu, Shuhua; Wu, Shutao; and Wang, Meizeng. 1983. Birth control of women of reproductive age. Special Issue of the *Renkou Yu Jingji,* July, pp. 130–36.

Renkou Yu Jingji Editorial Board. 1983. *An analysis of a national one-per-thousand population sample survey in birth rate* (Special Issue of the *Renkou Yu Jingji*). Beijing: Renkou Yu Jingji Editorial Board, Beijing Institute of Economics.

Song, Yungjie; Shi, Yulin; and Zhang, Guichao. 1983. The order-birth of women's fertility. Special Issue of the *Renkou Yu Jingji,* July, pp. 56–61.

Speed up the pace of building-up small cities and towns. 1984. *People's Daily* (Beijing), 5 June, p. 1.

State statistical bureau publishes major figures from the population census of this year. 1982. *People's Daily* (Beijing), 28 October, p. 1.

State Statistical Bureau. 1984. Documents: Communique on fulfillment of China's 1983 national economic plan—issued on April 29, 1984, by the State Statistical Bureau. *Beijing Review* 27, no. 20: centerfold, xi.

Tien, H. Y. 1973. *China's population struggle.* Columbus: Ohio State University Press.

———. 1983. China: Demographic billionaire. *Population Bulletin* 38, no. 2:1–42.

Wang, Jianming. 1982. Interrelation between population and economy must be studied according to the reality. *Renkou Yanjiu* 2:18–19.

Wen, Zhifu, and Wei, Cen. 1983. Analysis of dynamics on late and early marriage rates of women since the foundation of P.R.C. Special Issue of the *Renkou Yu Jingji,* July, pp. 126–29.

Xiao, Wencheng; Li, Menghua; and Wang, Liying. 1983. Changes in the total fertility of women since 1950s. Special Issue of the *Renkou Yu Jingji,* July, pp. 52–55.

Xiao, Zhenyu, and Chen, Shengli. 1983. The present task of the family planning as suggested by the findings of the national sample survey of the fertility. *Renkou Yanjiu* 4:20–23.

Xu, Shaozhi. 1982. To control population growth, 'taking full responsibility' should be focused. *Renkou Yanjiu* 4:47–48.

Yan, Huirong, and Wang, Jin. 1983. Comparison concerning the average number of existing children of married women of reproductive age. Special Issue of the *Renkou Yu Jingji,* July, pp. 70–71.

Yao, Shimou, and Wu, Chucai. 1982. A special form

of urbanization of rural population in China—a comment on the population of 'both workers and peasants.' *ACTA Geographica Sinica* 37:155–63.

Zhao, Jianmin, and Sun, Jinghua. 1983. Educational and fertility level of women of reproductive age. Special Issue of the *Renkou Yu Jingji,* July, pp. 80–82.

Zhao, Liren, and Zhu, Chuzhu. 1983. A preliminary inquiry about the problem of second birth outside the plan. *Renkou Yanjiu* 3:36–39.

Zhao, Xun. 1983. Conference on national population development regionalization held in Kunming. *Renkou Yanjiu* 4:17.

Zhou, Shigang. 1983. An inquiry about implementing old-aged insurance to one-child families in the countryside. *Renkou Yanjiu* 5:53–55.

Zhu, Mian. 1982. Agricultural production responsibility system and the work of family planning in the rural area. *Renkou Yanjiu* 5:27–31.