# Population Development in Tibet and Related Issues

Zhang Tianlu



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### **Preface**

This book features a study of population development and relevant issues in Tibet Autonomous Region and a general survey of the Tibetan population throughout China. It is an important monograph to analyze, with abundant data and an attitude of seeking-truth-from-facts, the past, present and future of the population in Tibet as well as the Tibetan population in other parts of China in the fields of the ethnic composition, population distribution, marriage, fertility, mortality, average life expectancy, quality of life, and socioeconomic development. In addition, several feasible proposals are made regarding the situation in the region and that of the Tibetan people in the country as a whole.

For hundreds of years before 1951, the Tibetan people lived and propagated under very rigorous geographical conditions rarely experienced by other ethnic groups in the world. These poor conditions included the following:

First, a unique and rigorous geographical environment. Tibet Autonomous Region and the areas inhabited by the Tibetan people for generations are located on the Oinghai-Tibet Plateau, known as "the Roof of the World" at an average altitude of over 4,000 meters above sea level. Of the total area of Tibet Autonomous Region, 45.6 percent is over 5,000 meters above sea level. In some areas of Tibet, the climate is frigid, arid, windy and changeable; the air is thin; solar radiation is strong; and the atmospheric pressure and the oxygen content in the air are low. All these, particularly oxygen deficiency resulting from the high altitude, frigid climate and low atmospheric pressure, are detrimental to the health of man. For instance, the atmospheric pressure in Lhasa City with an elevation of 3,647 meters is only two-thirds of that at sea level while in places at an altitude of 5,500 meters, the atmospheric pressure is only half of that in coastal plains. As a result, the absolute oxygen content of the air drops accordingly. The negative impacts of all these unfavorable conditions on the human body are reflected in a high incidence of plateau sicknesses such as heart disease, multiplication of red

blood cells, pulmonary edema and hydrocephalus. Moreover, the weight of infants is generally lower than that of those born in plain areas. The incidences of spontaneous abortions and premature births are higher than those in coastal plains, especially among new immigrants. In terms of the average height and weight, school-age Tibetan children and children born by immigrant Han residents compare unfavorably with their peers living in plain areas. Adaptability to the high altitude by Tibetan school-age children is characterized by being short and thin physically, having long legs and well-developed chest and slow physical development. Puberty of young girls is postponed and girls' menarche comes from one to three years later than girls in plain areas. The infant mortality rate increases along with the rise of the altitude, while the average life expectancy is in an inverse correlation with the altitude.

To understand the harm the plateau environment inflicts upon the human body and to try to adapt themselves to it physically are essential issues the plateau population must face for survival and development.

Second, a long-term rule of feudal serfdom in Tibet. Under the feudal serf system, serfs were not only subject to ruthless exploitation and therefore, lived in abject poverty, but also landed in an inhuman situation in which they could be whipped, sold, and even killed at the whim of serf owners. One can imagine that since the overwhelming majority of Tibetans lived under such a backward and barbarous rule, their physical quality was inevitably poor, the mortality rate high, the average life expectancy short, and the quality of life low. Other parts of China and many other countries also experienced such a social system, however Tibet witnessed a much longer duration last from the 10th century until 1959 when the Democratic Reform was launched to bring the serf system to an end. The feudal serf system had remained intact for nine centuries. From the foregoing we can conclude that the feudal serf system was the major factor which retarded population growth and the socioeconomic development in Tibet.

Third, the prevalence of Tibetan Buddhism. Also known as

Lamaism, Tibetan Buddhism came into being by incorporating the exoteric and esoteric sects of Buddhism introduced from India during the eighth century, Mahayana Buddhism from areas inhabited by the Han Chinese and Tibet's indigenous shamanism known as Bon. By the 11th century, the Nyingma (Red), Kagyu (White), Sakya (Striped) and Kadam (Black) sects had emerged and gained considerable influence in Tibet. During the 15th century, Tsongkhapa carried out religious reforms and established the Gelug (Yellow) sect on the basis of the Kadam sect. For many years thereafter the Gelugs had the largest number of lamas and lamaseries with its most followers of any Tibetan Buddhist sects. Therefore, it exerted the greatest influence on the development of Tibetan society and population. Because lamas are prohibited from marriage according to the specifications of the code of the Gelug sect, the increasing number of lamas and their large proportion to the total population led to an increasing number of surplus women of marriageable age. As a result, the fertility rate of women and population growth were adversely influenced by a high percentage of women living in lifetime celibacy and a high percentage of women with no children lifetime.

After the peaceful liberation of Tibet in 1951, and especially after the Democratic Reform in 1959, the central government of China carried out a policy to encourage economic development and population increase in Tibet. Since 1985, the central government has promoted the "one couple, two children" policy among government employees, staff and workers and urban residents of Tibetan and other ethnic groups, while in agricultural and pastoral areas, efforts have been made only to disseminate the information about population and family planning. Those farmers and herdsmen who have already had many children and prefer to practise contraception of their own accord are provided with contraceptive services.

Due to these unique factors, population development and some relevant indicators in Tibet are characterized by the following features:

1. The population in Tibet grew first at a low rate, then at a

higher rate and later at a relatively high rate. Historically, the population in Tibet came to a standstill, remaining at about one million for a fairly long period of time. It increased from 1.05 million in 1951 to 2.196 million in 1990 at an annual growth rate of 1.91 percent and will reach 4.2131 million by 2040, an increase by 89.98 percent over the number in 1990 and at an average annual growth rate of 1.29 percent according to a medium-variant projection in the coming 50 years.

- 2. The Tibetan people have always made up the largest proportion in the population in Tibet. They made up 95.48 percent of the total population in Tibet, while the Han people 3.68 percent and other ethnic population 0.84 percent in 1990. In the Tibet autonomous prefectures and counties of Qinghai, Gansu, Sichuan and Yunnan provinces in 1990, Tibetans accounted for 66.16 percent of the total population locally, while the Han people and other ethnic population, 23.45 percent and 10.39 percent respectively.
- 3. A high percentage of unmarried Tibetan women. Of total women in Tibet unmarried women between 15 and 69 was as high as 30.1 percent (28.1 percent for Tibetan women in the country), the highest of all provinces and autonomous regions and of all ethnic groups in China according to data from the 1990 national population census. The percentage (10.8 percent) of unmarried Tibetan women between 65 and 69 in Tibet and that (9.2 percent) of unmarried Tibetan women in the country are far higher than that (0.2 percent) of unmarried Uygur women.
- 4. The mean age of first marriage for Tibetan women is higher than that of women of any other ethnic groups in the region. In 1990 the mean age of first marriage for Tibetan women in Tibet was 23.1 years, higher than that of the national average and that of women of any other ethnic groups in China.
- 5. The total fertility rate of women in Tibet increased from low to high and then to relatively high. It fluctuated from 3.2 to 3.8 between 1950 and 1957; from 4.0 to over 5.0 between 1958 and the mid-1980s and somewhat higher than 4.0 between the mid-1980s and the present.
  - 6. The percentage of Tibetan women remaining celibacy is

still high though there is some decline. The percentage of women in the age group of 60-64 in 1990 was 17.7, 16.3 percentage points higher than the national average (1.4 percent) for the corresponding age group, while that of Tibetan women in the 40-45 age group is 9.4, 8.3 percentage points higher than the national average (1.1 percent).

7. The characteristics of the physical development of Tibetan students. The physical development of Tibetan youth in Tibet had seen somewhat improvement from 1965 to 1982. However, Tibetan school boys and girls aged 17 in 1982 were shorter in height by 8.39 cm and 4.25 cm respectively than their peers in Beijing in 1979 and were lighter in weight by 7.35 kg and 6.90 kg respectively than their peers in Beijing. It means that the height of Tibetan boys and girls was 8.39 cm and 4.25 cm shorter, but their chest measurements were larger than their Beijing peers by 3.65 cm and 3.79 cm respectively.

- 8. A higher percentage of the disabled to the total population in Tibet. The data from the 1987 national sample survey on the disabled population show that in Tibet 30.71 percent of the households interviewed had disabled people, 12.60 percentage points higher than the national average (12.60 percent), the highest among all provinces, centrally administered municipalities and autonomous regions. Of those surveyed, 7.25 percent were disabled, 2.35 percentage points higher than the national average, also the highest among all provinces, centrally administered municipalities and autonomous regions in the country.
- 9. The infant mortality rate stands very high at present, although there was a slight decline in the past. Though a sharp drop from 430 per thousand in 1951 to 97.40 per thousand in 1990 was recorded, it still represented the highest in the country.
- 10. The maternal mortality rate of women in Tibet remains high, although it is lower than before. It reduced from 500 deaths per 10,000 women in 1951 to 143 per 10,000 women in 1985, and further to 71 per 10,000 women in 1989 and 57 per 10,000 women in 1994 respectively. Nevertheless, it is still much higher than the national average (5.8 per 10,000 women).
  - 11. The average life expectancy of the population in Tibet is

much lower. It was 59.61 years in 1990, lower than the average age of the Tibetan population living elsewhere of the country (61.60 years) and the national average of China's population (70.05 years).

- 12. The sex ratio of the male to female population is obviously low. Its main manifestations are as the following: (1) The sex ratio of the total population in Tibet is still low, although it is a little higher than before. It was below 95 from 1952 to 1975 and rose to only 98.5 in 1990; (2) In 1990, the sex ratio was low in all the age groups. It was 99.9 for those below the age 0 and was just over 100.0 for the age groups of 1-4, 5-9, 10-14 and 15-19. However, it was all below 100.0 for other age groups; (3) The sex ratio of newborns remains low, but it shows a slight increase. It rose from 95.7 in 1982 and 95.5 in 1983 to 103.9 in 1990.
- 13. The illiteracy rate for adults declined slightly. In the old days in Tibet, it was as high as 90.6 percent (80.0 percent for males and 97.9 percent for females). It dropped to 69.34 percent in 1990 (55.49 percent for males and 83.08 percent for females); however, newly emerging illiterates pose a serious problem in Tibet.
- 14. The present situation of the quality of life of the population in Tibet. In 1990, the quality of life index of the population in the region was 54.23 (56.08 for males and 51.10 for females), far below the national average of 84.68 (86.40 for males and 82.07 for females).

All these show that significant achievements have been made in increasing the number of population and improving the quality of life during a short span of 30 to 40 years. But many problems left over from the old days remain to be solved. The task ahead for Tibet is to speed up the modernization of Tibet's population. That is to adjust the relationship among population growth, improvement in the quality of life and socioeconomic development so as to bring about balanced population and socioeconomic development.

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### Chapter One Tibet's Population: Its Past and Present

### I. Historical Population: Conjecture and Estimation

How large was the population size in Tibet in the past? After the peaceful liberation of Tibet, and especially after the Democratic Reform beginning in 1959, did the population in Tibet and the Tibetan population in China at large increase or decrease? These are the questions this book attempts to answer.

In answering these questions, three principles should be observed:

First, to make a comparison of changes in the population size, geographical scopes and the size of areas should be made comparable. The target population of my study is mainly the population. especially the Tibetan population in Tibet, in contemporary Tibet with an area of 1.2 million square kilometers, but neither the Tibetan population at large living in all areas inhabited by Tibetans including the Tibet Autonomous Region and the 10 Tibetan autonomous prefectures and two autonomous counties in Oinghai, Sichuan, Gansu and Yunnan provinces with a total area of 2.174 million square kilometers, nor the population under the Tubo (or Bon) Regime during the seventh-ninth centuries. Because at its height of power and splendor, the Tubo Regime covered not only the Qinghai-Tibet Plateau, but also the four prefectures of Ani and Longyou (present-day Gansu) areas west of the Yellow River with a total area of 2.4537 million square kilometers.

The population in Tibet should never be confused with the present Tibetan population living in all parts of the country and the historical Tibetan population under the Tubo Regime; the population in Tibet is only a component of the Tibetan population throughout the country.

Second, there are complete and regular household statistical

data, survey data for part of households, data by conjecture and estimation for the same administrative area at present. It is not scientific to make comparisons of these data because their accuracies are different. For example, because there was no household registration system in old Tibet, all the population data were estimates or the outcome of conjecture. The situation remained unchanged until 1964. A relatively accomplished population registration system was initiated only in 1965. Therefore, it is not advisable to compare the population data obtained in Tibet after 1965 directly with those obtained in 1950, and especially with those collected in the old days.

Third, there is discrepancy in the accuracy of population data obtained from direct population registration and indirect surveys. Therefore, comparison cannot be made between these data in an over simplified way. Surveys of the population in part of Tibet were conducted in the Yuan Dynasty (1271-1368) and the Qing Dynasty (1644-1911), and the data were used to estimate the total population in entire Tibet. Population censuses were carried out in 1982 and 1990, and accurate data of the Tibetan population were obtained. One cannot draw a reliable conclusion from comparisons between the recent census data and the survey data in the past.

How large was the population size in Tibet in the past dynasties remains a riddle difficult to guess.

During the reign of the Tubo Dynasty in the seventh and eighth centuries, there was a total Tibetan population about three million in areas under the Tubo Regime, of which no more than 800,000 lived in the present-day Tibet Autonomous Region, according to estimation made by Mr. Hu Huanyong.

After the founding of the Yuan Dynasty in 1260, Tibet was completely brought under the rule of the Central Empire. Three surveys of the Tibetan population in Tibet were conducted in the first year (1260) of Zhongtong reign, the fifth year (1268) and the 24th year (1287) of Zhiyuan reign of the Yuan Dynasty. These surveys were carried out only in U (Frontal Tibet with Lhasa as its center) and Tsang (Rear Tibet with Xigaze as its center) among a population of 234,000 and it was estimated that

### TIBET'S POPULATION: ITS PAST AND PRESENT

"the 13 Wan Hu (each Wan Hu had 10,000 households) had a population of 600,000 and 700,000." If taking into consideration the unsurveyed areas, such as the Sakya Prefecture (3,630 households with 21,780 people), Ngari Prefecture (3,402 households with 20,412 people), Chamdo Prefecture (about 50,000 people), and the areas inhabited by the ethnic Monba and Lopa (about 150,000 people), the 2,332 households with about 13,992 people not included in the Wan Hu of U and Tsang, and the 70,000 lamas and nuns in Tibet, the total population in Tibet should have been about one million.<sup>3</sup>

From Yongzheng reign to early Oianlong reign (1734-1736). the Oing government conducted household registrations through its Population Registration Bureau in Lhasa. The Xizang Zhi (Annals of Tibet) compiled during the Qing Dynasty reported that in the second year (1737) of Qianlong reign a record was made and submitted to the Li Fan Yuan (Ministry for Ethnic Minority Affairs) stating that 68 cities and towns, 121,438 households. 3,150 lamaseries and temples with 302,560 lamas were under the rule of Dalai Lama, who lived in the Potala Palace, and that 327 lamaseries with 13,671 lamas, and 13 cities and towns with 6,752 households were ruled by the Panchen Lama residing in the Tashilhunpo Monastery. In the early period of the Oing Dynasty in the area that is now Tibet, there were 128,190 households under the rule of Dalai Lama and Baingen Lama. Assuming there were 4.5 persons in each household, there should be 576.855 people, and plus 316,231 lamas and nuns, there should be a total population of 893,086 at that time in Tibet.

In addition, within the boundaries of Tibet there were also 4,889 households with a population of 17,606 in the Horcho area inhabited by 39 tribes; 538 households with 2,959 people in the Dam Mongolian area; and 5,000 households with 27,500 people in the Upper Bomi area.

To sum up, during Yongzheng and Qianlong reign (1723-1795) of the Qing Dynasty, there were altogether 941,151 people in Tibet, of whom 316,231 or 33.6 percent were lamas.<sup>4</sup>

China Daily of February 1, 1935, or the 24th year of the Republic of China, published a talk by Dr. Lin Donghai who had

just returned from a trip to Tibet in his capacity as counselor of the Ministry of Foreign Affairs. Among other things, he stated:

"It was said that Tibet had a population of five million. The population in Tibet numbered from three to five million according to some publications in Western Europe. However, some surveys claimed to be one million at most. There are about 700,000 or 800,000 people at most, including lamas who make up one-fifth of the total population in Tibet, according to my own investigation."

In his paper entitled "The Distribution of China's Population" published in the same year (1935), Mr. Hu Huanyong said that Tibet's population numbered 800,000 and that if the Tibetan people living in Chamdo and Ngari prefectures were added, the total number would be slightly over one million.5 The Atlas of Present-Day China compiled by Dr. Sun Yat-sen in 1899 argued that there were six million people living in Tibet with an area of 651.500 square miles (or 1.687 million square kilometers).6 This argument, however, was far fetched, and that was why when the figure was cited in a reader's letter in the July 1984 issue of National Geography, the editor's note added that the six million might be regarded as the total Tibetan population in the world.<sup>7</sup> Mr. Li Youyi had this to say, "In the period of great prosperity of the Tubo Regime, there was a population as large as 10 million, of which five or six million were Tibetans."8 Obviously, the figure of the "six million Tibetans" did not refer to Tibetans living within the present-day boundaries of Tibet. The level of productivity in Tibet at that time could in no way support such a large population. Such a large population can not be properly supported even if by the present-day development level of productivity in Tibet.

Some scholars, such as Mr. Ya Hanzhang<sup>9</sup>, went so far as to believe in this regard that there was once a Tibetan population of over 10 million; Hugh E. Richardson in his book entitled *Tibet and Its History* published in 1962 asserted that the total number of Tibetans was as high as 33 million in the 18th century.<sup>10</sup>

Estimation does not mean facts. Though history could not

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