Population structure and distribution of Our Country

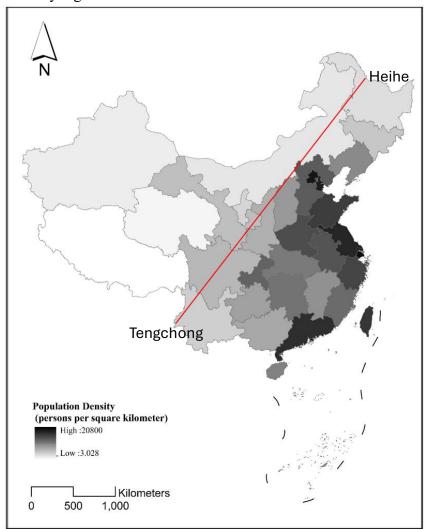
I. Overview of the population structure in our country

- Our country is one of the world's most populous countries, with a diverse and uneven population distribution influenced by various factors such as relief, economic development, and urbanisation.
- According to the Seventh National Population Census (National Bureau of Statistics of China, 2021), which is the latest census in our country, the important features of the population are as follows:
 - Population growth rate: The average annual growth rate was 0.53%, down by 0.04% compared with the average annual growth rate of 0.57% from 2000 to 2010. The data showed that the population of our country maintained a mild growth momentum in the past decade.
 - Fertility rate: The total fertility rate in 2020 was 1.3, indicating low birth rates despite the two-child policy.
 - Household size: The average household size decreased to 2.62 people per household.
 - Sex ratio: The sex ratio is 105.1 (female=100, male to female), It is basically the same as the Sixth National Population Census in 2010.
 - Aging population: Over 264 million people are aged 60 and above, accounting for 18.7% of the whole population (specifically, 13.5% are in the age group 65 and over). Compared with 2010, the shares of people in the age groups of 60 and above increased by 5.44%, reflecting an aging society.
 - Education levels: About 218 million people have attained university education. Compared with 2010, the number of people with a university education went up from 8,930 persons to 15,467 persons per 100,000 persons, the average years of schooling for people aged 15 and above increased from 9.08 years to 9.91 years, and the illiteracy rate dropped from 4.08 percent to 2.67 percent. These reflect that the overall educational attainment has been improved.
 - Urbanisation: Compared with 2010, the urban population increased by over 236 million, raising the urbanisation rate to 63.89%. The proportion of urban population has increased by 14.21%.
 - Floating population: There was a significant increase in population mobility, with 492.76 million people living apart from their registered households.
 - Ethnic composition: Han Chinese comprise 91.11% of the population, while ethnic minorities account for 8.89%.
- As of 2022, the population were approximately 1.41 billion in our country, with a population density of about 147 people / km² (National Bureau of Statistics of China, 2023).

II. The Hu Huanyong Line

- The Hu Huanyong Line (Figure 1), named after the Chinese geographer Hu Huanyong, marks a significant boundary in our country's population geography. This line vividly illustrates the difference in population distribution between our country's eastern and western regions.
 - The Hu Huanyong Line runs from Heihe (in Heilongjiang Province) in the northeast to Tengchong (in Yunnan Province) in the southwest.
 - Although the region southeast of the line covers only about 43% of our country's total land area, approximately 94% of our country's population resides there (National Bureau of Statistics of China, 2023).
 - In the region northwest of the line, which makes up about 57% of our country's total land area, only about 6% of our country's population lives there (National Bureau of Statistics of China, 2023).

Figure 1 The Hu Huanyong Line



III. Factors contributing to the uneven population distribution in our country

• Relief and climate

- Relief: Our country's eastern region is home to fertile plains and river valleys like the North China Plain, Yangtze River Delta, and Zhujiang Delta. These areas are ideal for agriculture and have enough food resources to support large populations and urban development. In contrast, our country's western region is defined by mountains, plateaux, and deserts. For example, the Tianshan and Kunlun mountain ranges, as well as deserts such as the Gobi and Taklamakan, are not ideal for large-scale agriculture and dense human settlements (Zhao, 1994).
- Climate: The climate in our country's eastern region (ranging from warm temperature in the north to subtropical and tropical in the south) is generally more moderate than the arid and harsh climates of the west, with adequate rainfall and mild temperatures conducive to agriculture. Furthermore, the western region of our country experiences arid and semi-arid climates with little rainfall. (中國人民共和國中央人民政府, 2005).

The scarcity of water resources severely limits agriculture and human habitation.

• Economic development

- Industrial and economic hubs: Our country's eastern coastline has several natural harbours (e.g., Shanghai Port, Ningbo-Zhoushan Port, Qingdao Port, and Dalian Port), which facilitate industrial manufacturing and trade and contribute to the development of coastal cities. Furthermore, the eastern region of our country is home to major economic hubs such as Beijing, Shanghai, and Guangzhou, which attract significant domestic and international investment. This provides plentiful job opportunities and higher living standards, attracting people to the region (World Bank, 2024).
- Resource-based economy: Compared to the more diversified economies of the east, the economy in the western regions is reliant on resource extraction (e.g., mining and energy production), with fewer opportunities in other industries. This limits employment prospects and economic growth, and hence, there are fewer urban centres and industrial bases in the western region of our country.

• Historical and political factors

- Historical settlement patterns: Historically, our country's ancient civilisations and early settlements were concentrated in the fertile eastern plains and river valleys, leading to long-standing population centres in the eastern region of our country due to better agricultural conditions. The rice and wheat farming in the east supported larger, more stable populations than pastoral and nomadic lifestyles in the west (美, 1993).
- Government policies: Although recent policies aim to develop the western regions, the focus on economic growth and infrastructure development has historically been centred in the east, such as initially setting up Special Economic Zones in Shantou, Shenzhen, and Zhuhai in Guangdong, Xiamen in Fujian, and Hainan Island. This makes the economic growth and urban development concentrated in the eastern coastal provinces.

• Urbanisation and population migration

Continued urbanisation: The process of urbanisation has been more pronounced in the eastern regions, with cities expanding and rural populations migrating to urban areas for

better opportunities. The Jing-Jin-Ji City Cluster, Yangtze River Delta City Cluster, and Guangdong-Hong Kong-Macao Greater Bay Area are examples.

IV. Conclusion

• The population structure in our country is complex. Besides, due to various factors, the geographic distribution of the population is uneven. The Hu Huanyong Line is a crucial concept in understanding China's population distribution and regional development. Despite efforts of our country to address the imbalance, significant disparities in population density persist between the eastern and western parts of China.

References

- 1. 姜濤 (1993). 中國近代人口史. 杭州: 浙江人民出版社.
- 2. National Bureau of Statistics of China. (2023). "China Statistical Yearbook 2023." https://www.stats.gov.cn/sj/ndsj/2023/indexeh.htm
- 3. National Bureau of Statistics of China. (2021). "Main Data of the Seventh National Population Census." https://www.stats.gov.cn/english/PressRelease/202105/t20210510 1817185.html
- 4. 中國人民共和國中央人民政府 (2005). "氣候." https://www.gov.cn/guoqing/2005-09/13/content 2582628.htm
- 5. World Bank. (2024). "China Overview: Development News, Research, Data." https://www.worldbank.org/en/country/china/overview
- 6. Zhao, S. (1994). Geography of China: Environment, Resources, Population, and Development. New York: John Wiley and Sons, 1994.