

**Learning and Teaching Resource Package Related to  
the Geography of China  
Topic 3 Agriculture and Food Supply  
(Worksheet, Junior Secondary)  
Theme: Distribution of Agricultural Regions**

**Pre-lesson task**

We will explore the distribution of agricultural regions in our country. By examining the following materials, we will gain a general understanding of the four main agricultural regions in our country: (1) the Northern Dryland Agricultural Region, (2) the Southern Paddy Agricultural Region, (3) the Northwestern Arid Agricultural Region and (4) the Qinghai-Tibet Plateau Agriculture Region. Read the Knowledge Box 3.1 and discuss the provided questions.

**Knowledge Box 3.1**

- Northern Dryland Agricultural Region: The Northern Dryland Agricultural Region boasts **expansive plains, fertile soil, and concentrated arable land**. With lower rainfall levels, most of the arable land in this area is dry land. The region primarily cultivates **wheat, corn, millet**, and other food crops, as well as cash crops like **sugar beets, cotton, and soybeans**. It holds significant importance as a dry farming area in our country. The North China Plain and Loess Plateau experience low precipitation, which is concentrated in the summer, leading to insufficient irrigation water and severe spring drought. To address the scarcity of freshwater resources, particularly in the Beijing-Tianjin region, the country has implemented cross-basin water diversion measures such as the South-to-North Water Diversion project. However, for long-term sustainability, the development of water-saving agriculture remains the only viable path for the region's agricultural growth.
- Southern Paddy Agricultural Region: The climate in the south is **hot and humid**, and the **water and heat conditions are excellent** for the development of agriculture. Most of the arableland is paddy fields, making it an important paddy field agricultural area in our country. In plain areas, the terrain is low and flat, with dense rivers and lakes, good irrigation conditions, and contiguous paddy fields; in mountainous areas, paddy fields are scattered in river valleys and gentle slopes. The main arable crop in the southern region is **rice**, but wheat, cotton, and oil crops are also grown. Additionally, this region is known for its **abundance of tea, bamboo, sugar cane, rubber, tropical and subtropical fruits such as citrus, bananas, and pineapples**.
- Northwestern Arid Agricultural Region: The Northwestern Arid Agricultural Region is

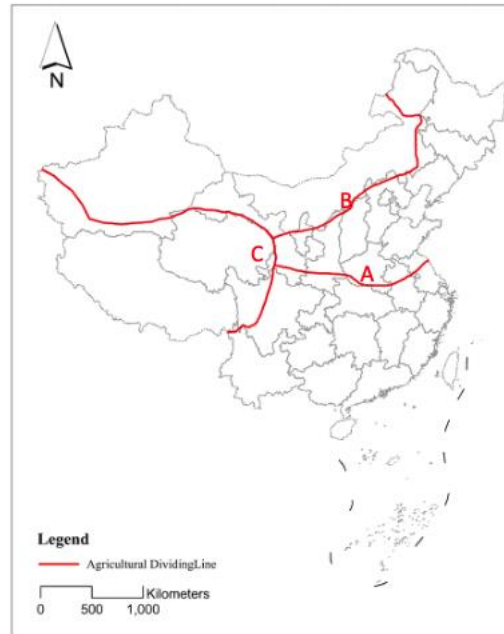
characterised by extensive pastures, making it a vital hub for **pastoral farming**. The eastern part of the region, located east of Helan Mountain, receives more precipitation and boasts abundant surface water resources. Notably, it is home to large, **high-quality grasslands** such as the Hulunbuir Grassland and Xilingol Grassland. Conversely, the western part of the region experiences minimal precipitation and is predominantly covered by Gobi and deserts. However, the mountainous areas in this region receive more rainfall and feature scattered alpine pastures. The northwestern region faces challenges due to **limited precipitation**, making it difficult to meet the water requirements for crop growth. Agriculture can only be developed and irrigated in areas with access to rivers, groundwater, and other water sources. Despite these challenges, the region benefits from its high temperatures, intense sunlight, and **significant temperature fluctuations between day and night during the summer**. These conditions contribute to the production of high-quality agricultural products, with locally grown melons and fruits gaining recognition both domestically and internationally.

- Qinghai-Tibet Plateau Agricultural Region: The Qinghai-Tibet Plateau is a unique highland pastoral area in our country. Its **high-cold conditions** have led to the widespread distribution of cold-resistant alpine meadows in the region. **Livestock, including yaks, Tibetan sheep, and Tibetan goats**, have adapted to the special plateau environments characterised by high cold, hypoxia, and low air pressure. The Qinghai-Tibet region experiences **lower temperatures and longer periods of sunshine**. In certain areas with lower altitudes, such as the Brahmaputra Valley in the south and the Huangshui Valley in the east, conditions are more favourable for agricultural production. River valley agriculture is prevalent in these areas, benefiting from higher temperatures and fertile soil. This environment is suitable for the cultivation of crops like highland barley and wheat, which thrive in warm and cool temperatures.





Reference: Grade 8, Volume 2, Junior School Geography Textbook, People's Education Press

- (a) Write the name of the four main agricultural regions at their correct locations on the map of China.

**Figure 3.1 Four main agricultural regions in China**



(b) Match the pictures of farming activities with the four main agricultural regions and discuss the differences in the farming activities.

	
Picture A	Picture B
	
Picture C	Picture D

Picture	Agricultural region
A	
B	
C	
D	

## In-class learning and teaching

Learning objectives:

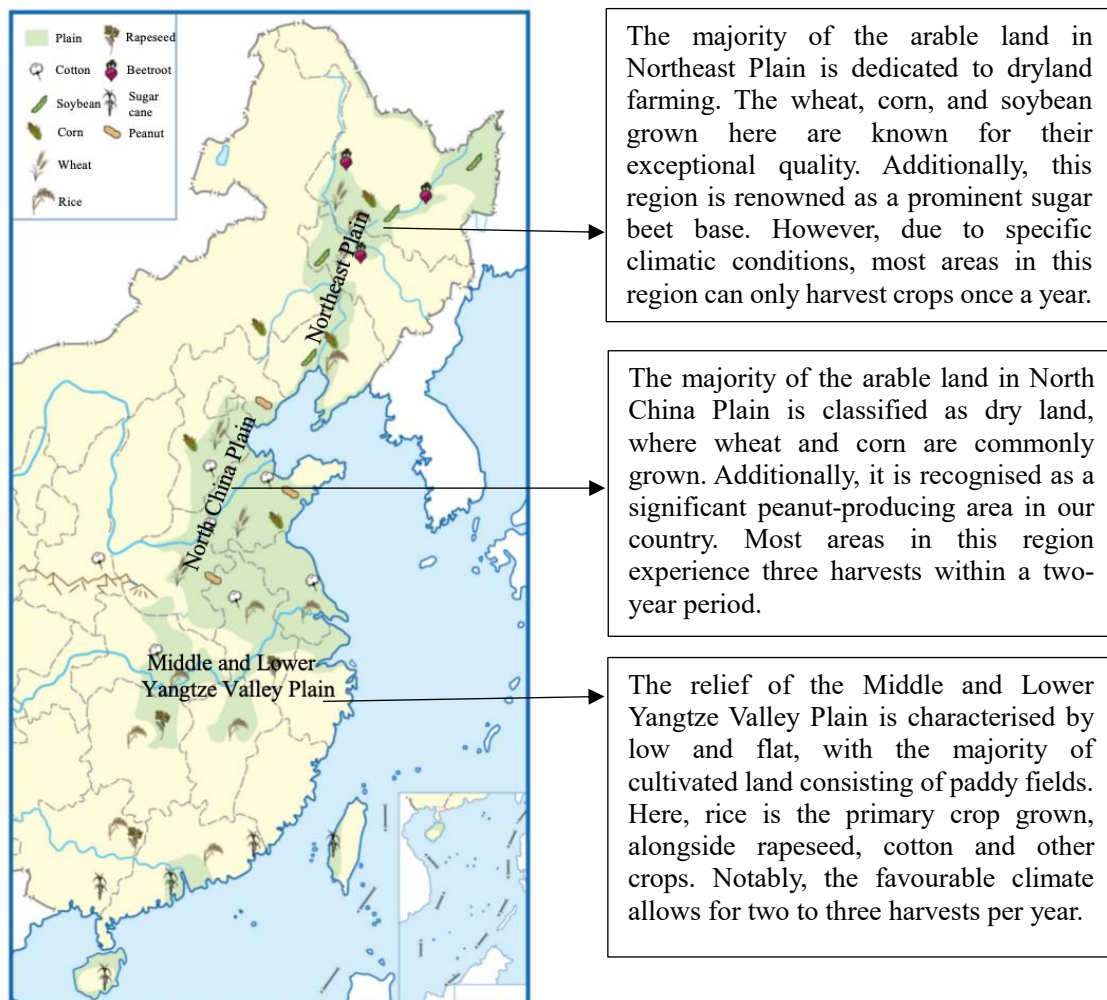
- To gain a comprehensive understanding of agriculture distribution across our country.
- To analyse the factors affecting the agriculture distribution in our country.

### Development 1: Arable farming areas in our country

Watch Topic 3 Agriculture and Food Supply video (junior, 0:00-3:40), read Knowledge Box 3.2, and discuss the questions below.

#### Knowledge Box 3.2

**Figure 3.2 Types of arable land in eastern part of China**

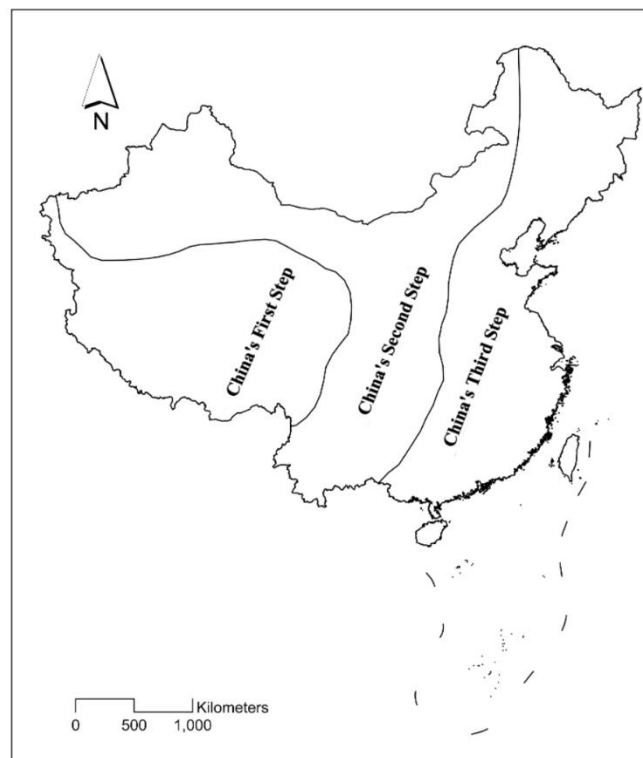


Reference: Grade 8, Volume 1, Junior School Geography Textbook, People's Education Press

- (a) Referring to Figure 3.1 “Four main agricultural regions in China”, where is the dividing line between the Northern Dryland Agricultural Region and the Southern Paddy Agricultural Region?

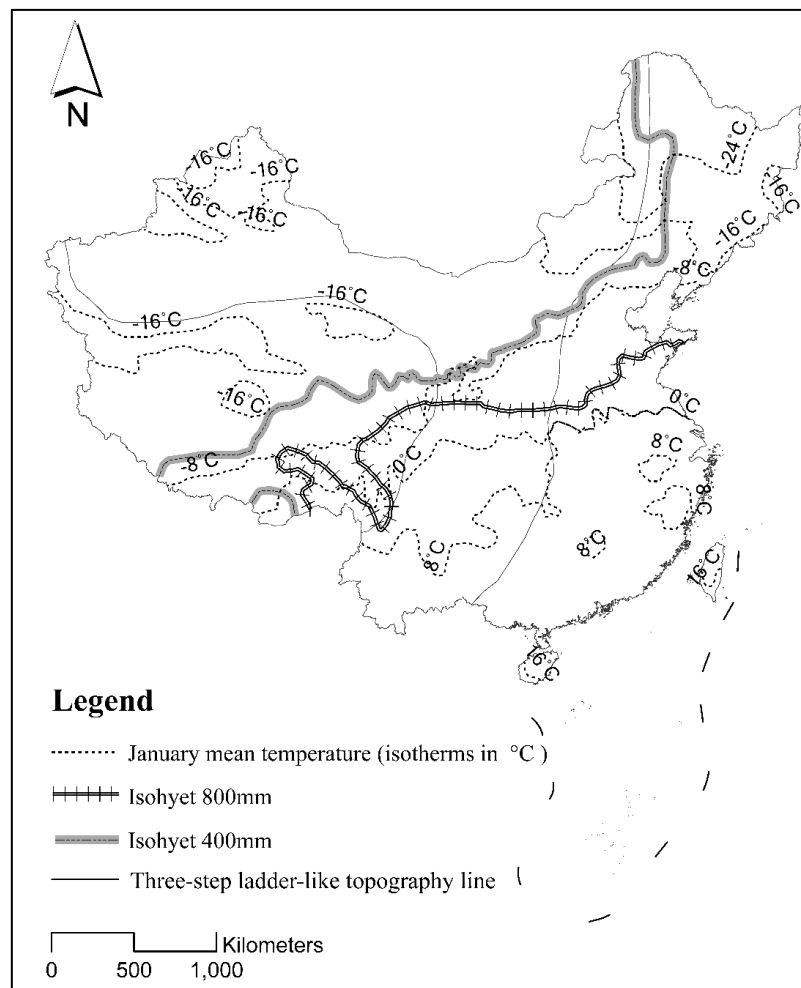
- (b) Referring to Figure 3.3, on which levels of our country’s three-step ladder-like topography are the Northern Dryland Agricultural Region and the Southern Paddy Agricultural Region located?

**Figure 3.3 The three-step ladder-like topography in China**



- (c) Referring to Figure 3.4, which isohyet closely aligns with the dividing line between the Northern Dryland Agricultural Region and the Southern Paddy Agricultural Region (line A)?

**Figure 3.4 China's three-step ladder-like topography lines, annual isohyet, and January isotherm**



- (d) Referring to Figure 3.4, which January isotherm closely aligns with the dividing line between the Northern Dryland Agricultural Region and the Southern Paddy Agricultural Region (line A)?

- (e) What are the distinct characteristics of the Northern Dryland Agricultural Region and the Southern Paddy Agricultural Regions? Discuss and circle the correct answer in the following table.

**Table 3.1 Characteristics of the Northern Dryland Agricultural Region and the Southern Paddy Agricultural Region**

	The Northern Dryland Agricultural Region	The Southern Paddy Agricultural Region
The average temperature in January	Below 0°C / Above 0°C	Below 0°C / Above 0°C
Annual rainfall (mm)	Below 800mm / Above 800mm	Below 800mm / Above 800mm
Rivers freeze in winter	Yes / No	Yes / No
Type of arable land (Dryland/Paddy land)	Dryland / Paddy land	Dryland / Paddy land
Cropping pattern	Annual single cropping and three cropping in two years / Annual double cropping, and annual triple cropping	Annual single cropping and three cropping in two years / Annual double cropping, and annual triple cropping
Major grains (list at least three)		



## Development 2: Pastoral farming areas in our country

Watch Topic 3 Agriculture and Food Supply video (junior, 3:41-7:00), read Knowledge Box 3.3, and discuss the questions below.

### Knowledge Box 3.3

- Northwest China is situated far inland and experiences an arid climate, while the Qinghai-Tibet Plateau boasts high terrain and a cold climate, which poses limitations on agricultural development. However, the region is abundant in vast pasturelands, making it a crucial pastoral area in our country. Additionally, irrigated agriculture has been successfully established in the foothill plains, the Huang He Hetao area, and the Ningxia Plain, where water sources for irrigation are available in the northwest. These areas are known for their bountiful harvests of wheat, high-quality cotton, sugar beets, grapes, and cantaloupe. In the valley regions with lower altitudes on the Qinghai-Tibet Plateau, cold-tolerant crops such as highland barley and rapeseed plants can be cultivated. These crops thrive in the cooler temperatures of the plateau's valley areas.
- Taking a dialectical view of the climatic conditions in northwest China: while certain restrictions are imposed on agricultural production, there are also notable advantages. The region experiences an abundance of sunny days, lower water vapour in the air, excellent air quality, strong solar radiation, and long hours of sunshine. These conditions contribute to the production of an ample amount of nutrients by crops and pastures due to the high daytime temperatures and intense radiation. Moreover, the cool nighttime temperatures result in lower nutrient consumption by crops and pasture, facilitating nutrient accumulation. These favourable climatic conditions in the northwest region contribute to high crop yields and superior quality. Fruits grown in this area are known for their exceptional sweetness, while cotton fibers exhibit remarkable length.

Reference: Grade 7, Volume 2, Junior School Geography Textbook, Shanghai Education Edition

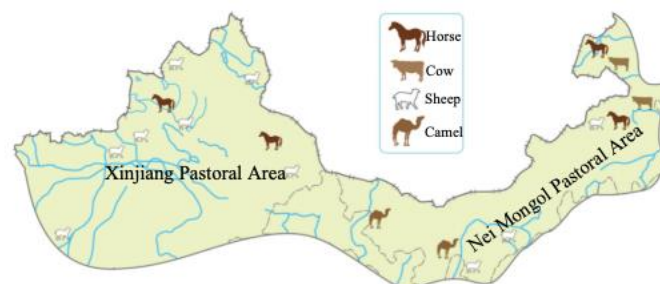
- (a) Referring to Figure 3.1 “Four main agricultural regions in China” in the Pre-lesson task, where is the dividing line between the Northern Dryland Agricultural Region and the Northwestern Arid Agricultural Region?

- (b) Referring to Figure 3.4 our country's three-step ladder-like topography line, annual isohyet, and January isotherm, which annual precipitation isoline closely aligns with the dividing line between the Northern Dryland Agricultural Region and the Northwestern Arid Agricultural Region (line B)?

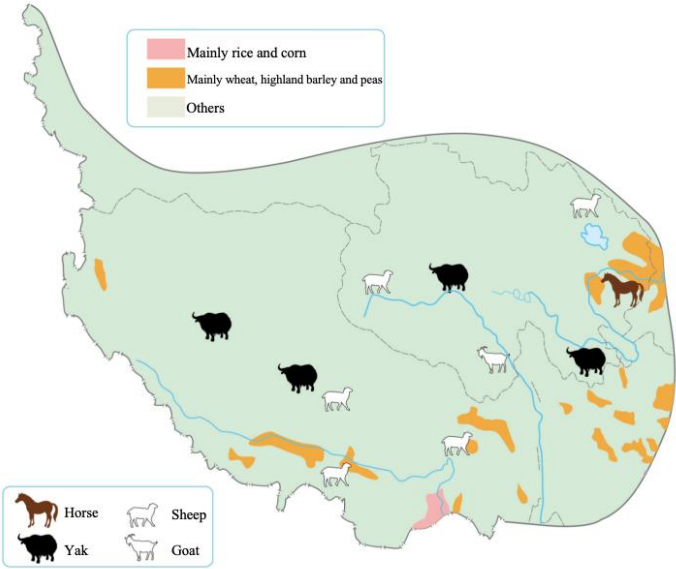
- (c) Referring to Figure 3.1 “Four main agricultural regions in China”, where is the dividing line between the Southern Paddy Agricultural Region, the Northwestern Arid Agricultural Region, and the Qinghai-Tibet Plateau Agriculture Region?

- (d) What are the favourable and limiting factors of developing agriculture in the Northwestern Agricultural Region and the Qinghai-Tibet Plateau Region?

**Figure 3.5 Agricultural Distribution in the the Northwestern Agricultural Region**



**Figure 3.6 Agricultural Distribution in the Qinghai-Tibet Plateau Region**



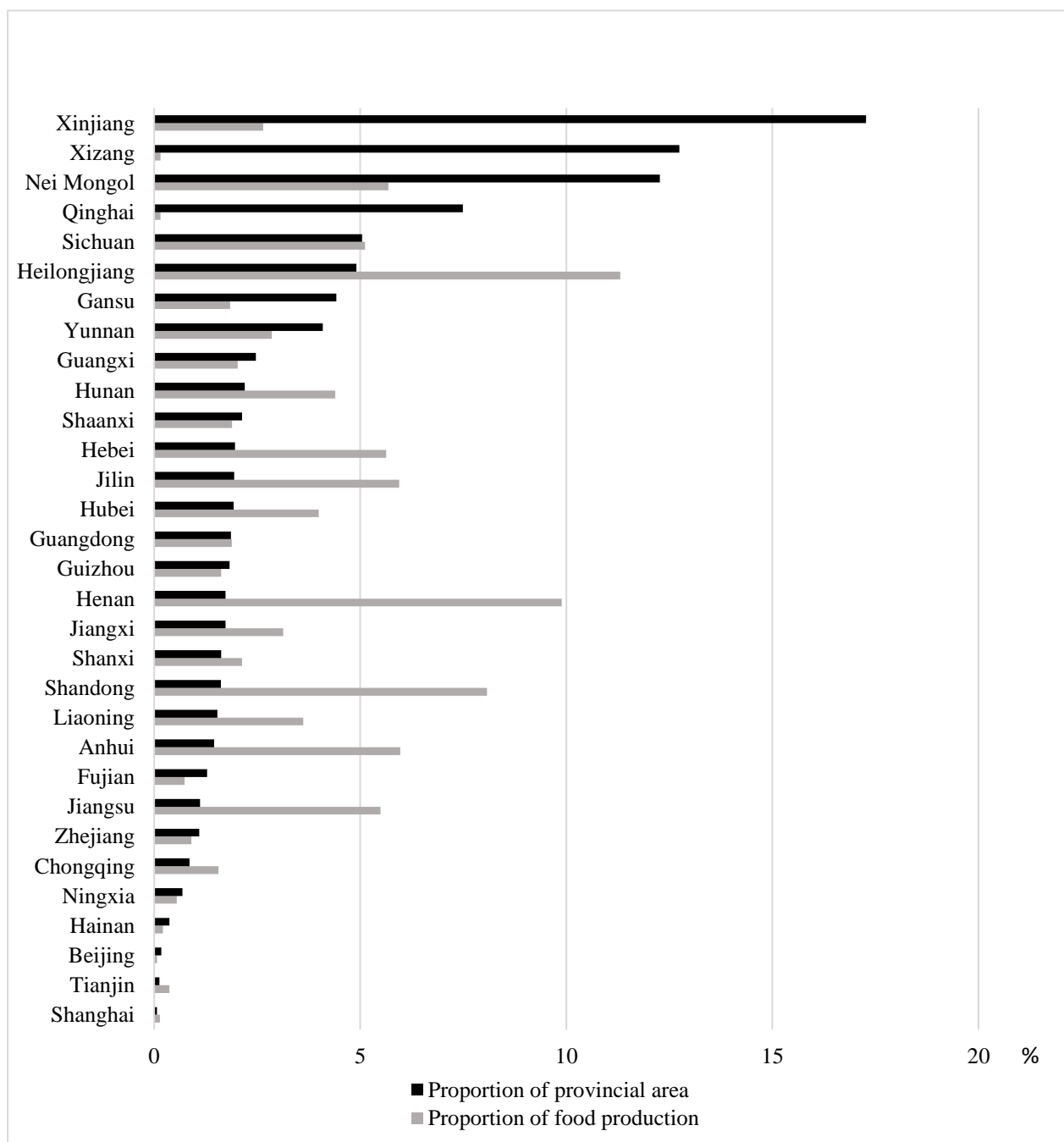
## Post-lesson task

Read Knowledge Box 3.4 and discuss the questions below:

### Knowledge Box 3.4

- The agricultural output of our country's provinces is not directly proportional to their land area (Figure 3.7). Due to differences in geographic and climatic conditions, there are significant variations in agricultural output across provinces. For example, **Xinjiang** and **Xizang** have vast land areas but relatively low agricultural production due to arid and cold climates. Although **Xinjiang** has abundant sunshine and large areas of land, water resources are scarce, and agricultural production is mainly concentrated in oasis zones, with cotton and speciality fruits as the main products. **Xizang**, with its high altitude and cold climate, has limited land suitable for farming and is dominated by highland barley.
- On the other hand, **Heilongjiang**, **Henan**, and **Shandong** are major grain production bases in our country. These provinces have flat relief, fertile soil, and favourable climates suitable for large-scale grain cultivation. **Heilongjiang** is the largest producer of corn and soybeans in the country, boasting fertile black soil. In 2023, **Heilongjiang** achieved its 20th consecutive year of increased grain production, with a total output of 155.764 billion jin (the second highest in history), accounting for 11.2% of the national total and ranking first in the country for 14 consecutive years. **Henan** is the largest summer grain-producing province in our country, primarily growing wheat and corn. **Shandong** is also a significant grain-producing region, with wheat and corn yields among the highest in our country. The high output in these areas is not only due to favorable natural conditions but also advanced agricultural technology and well-developed infrastructure.
- *Note: Summer grain refers to grain harvested in summer, mainly including wheat and early rice. Among them, the main summer grain in Henan Province is wheat.*

**Figure 3.7: Comparison between the proportion of provincial area and proportion of food production in provincial administrative regions in 2022**



Source: China Statistical Yearbook, 2023

(a) Which of the four agricultural regions is Heilongjiang located in? Which of the four agricultural regions is Xinjiang located in?

- A. Northern Dryland Agricultural Region; Qinghai-Tibet Plateau Agricultural Region
- B. Northern Dryland Agricultural Region; Northwestern Arid Agricultural Region
- C. Southern Paddy Agricultural Region; Qinghai-Tibet Plateau Agricultural Region
- D. Southern Paddy Agricultural Region; Northwestern Arid Agricultural Region

(b) Read Knowledge Box 3.4 and Figure 3.7. Is the agricultural output of each province in our country proportional to its land area? Why?

(c) Henan is our country's largest summer grain-producing province, with wheat as its primary crop. Wheat is widely cultivated, mainly concentrated in the Huang He basin and plain areas. Every summer, the sight of sprawling fields brimming with golden wheat is nothing short of breathtaking. For a comprehensive understanding of Henan's agricultural prowess, search online for what other major crops are produced in Henan Province to learn more about its agricultural production. This can help us to reveal the variety of major crops produced in this region, further illuminating the richness of Henan's agricultural landscape. Write a brief summary of the information that you collected.