

WORKING PAPER 409

SELECTED CHINESE MAPS

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FOREWORD

Geographers concerned with China have long felt the need of a convenient collection of maps; but it has been difficult to compile such a collection given the poor and incomplete coverage of originals from China, and the lack of materials with which to construct them. Matters have now improved somewhat, and the present experimental collection contains maps not only for physical geography, which have been available for some years, but also for agricultural systems, population distribution and industrial geography - all fields in which materials have been scarce.

All the materials in this Working Paper have been taken from Chinese originals - very little of this kind is so far available from China in English. An excellent romanised topographical atlas is available : this is *Zhonghua renmin gongheguo fen sheng dituji* (*Atlas of China in pinyin*), Cartographic Press, Beijing, 1977. This atlas uses romanised Chinese throughout but it is quite intelligible.

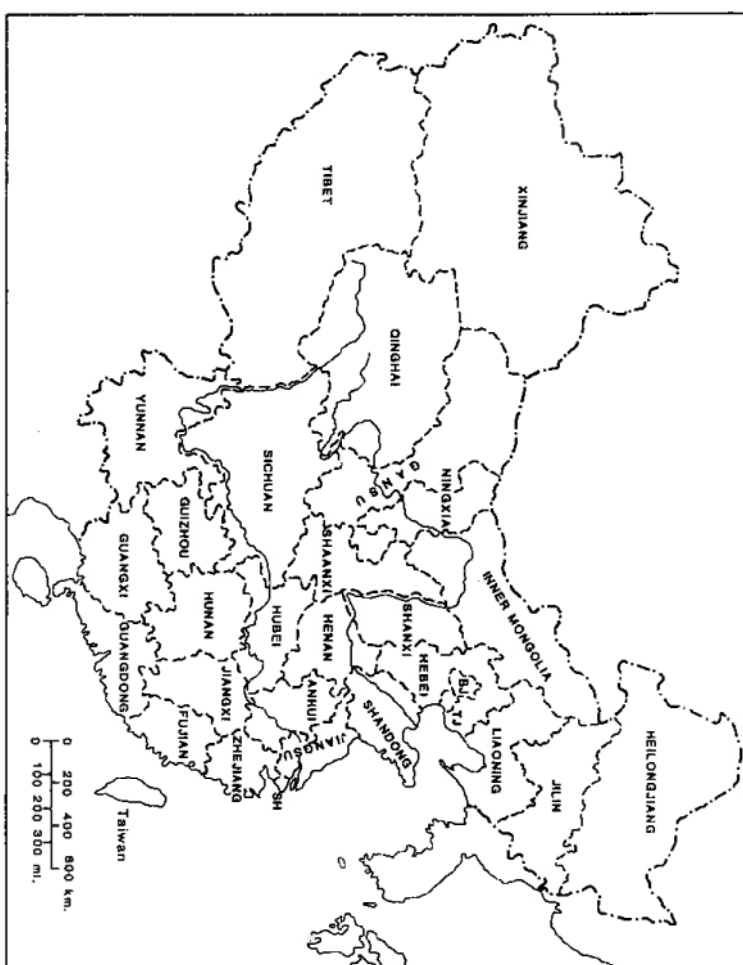
Maps 8, 9, 10, 13, 14 in this present collection were originally prepared for the author's *Rural China Today* (Longmans, London, 1985), and are reproduced by permission.

Most of the maps in this collection were drawn or redrawn by Tim Hadwin.

LIST OF MAPS

1. China - the provinces
2. Climatic indicators at major centres
3. Annual precipitation - millimetres
4. Isotherms - actual temperatures, January and July
5. Frost-free days
6. Soils
7. Natural vegetation
8. Cropping systems
9. Rural land use
10. Agricultural systems
11. Land resources
12. Isopleths of dates of sowing and harvest of winter and spring wheat
13. Grain yields per unit area, 1975
14. Areas of surplus and deficit in grain output
15. Rural population densities
16. Urban populations
17. Chinese industry - industrial jobs per 100 population, by provinces
18. Chinese industry - proportions of national total of industrial jobs, by provinces
19. Sixty-eight large and medium projects under the sixth five-year plan (1981-86)

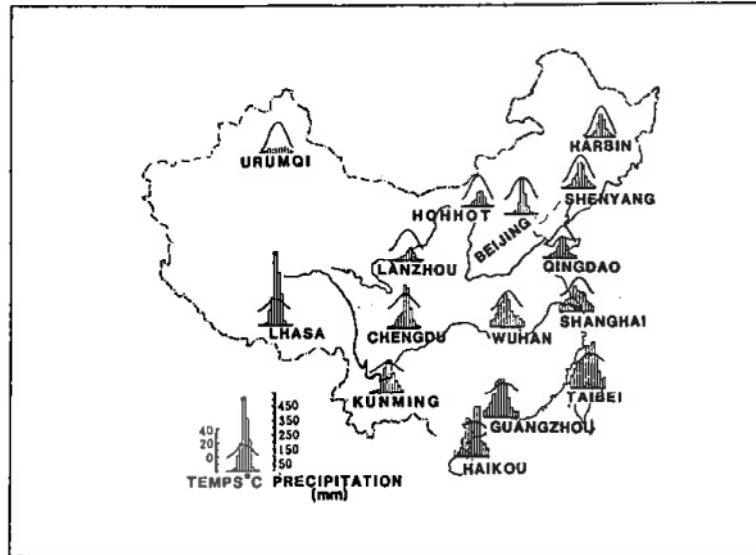
1. China - the provinces



Beijing, Tianjin and Shanghai (BJ, TJ and SH) have the rank of provinces

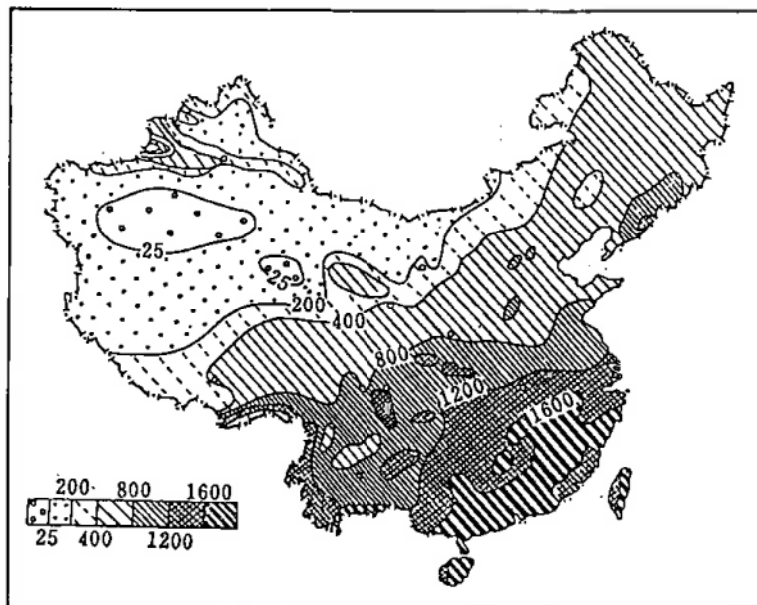
2. Climatic indicators at major centres

Source: JZD, 195

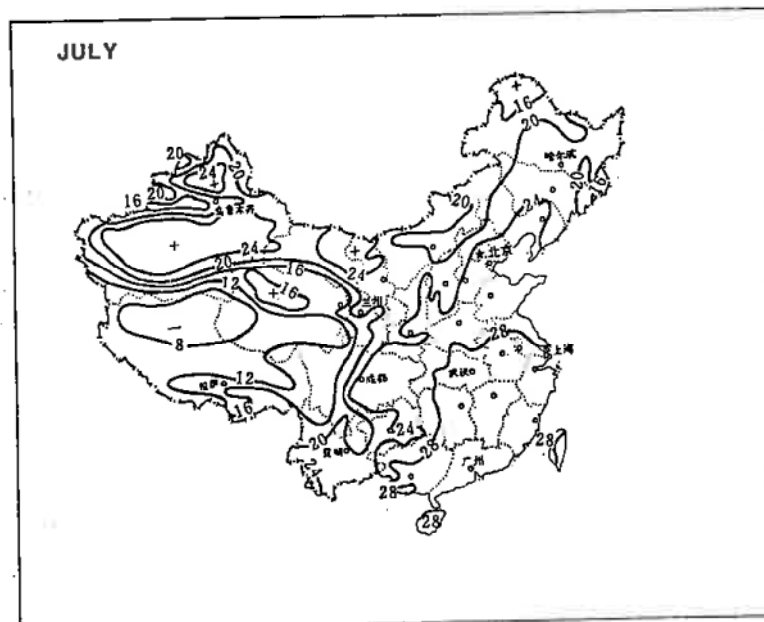
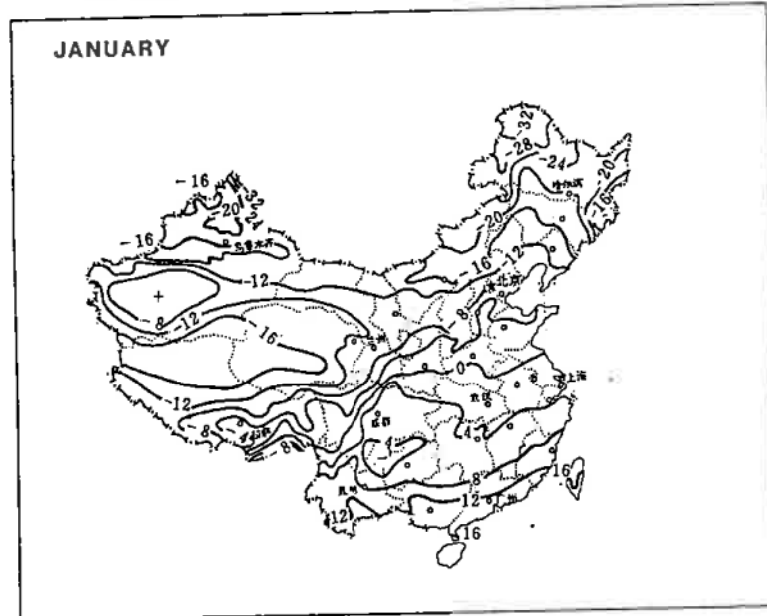


3. Annual precipitation - millimetres

Source: JZD, 179



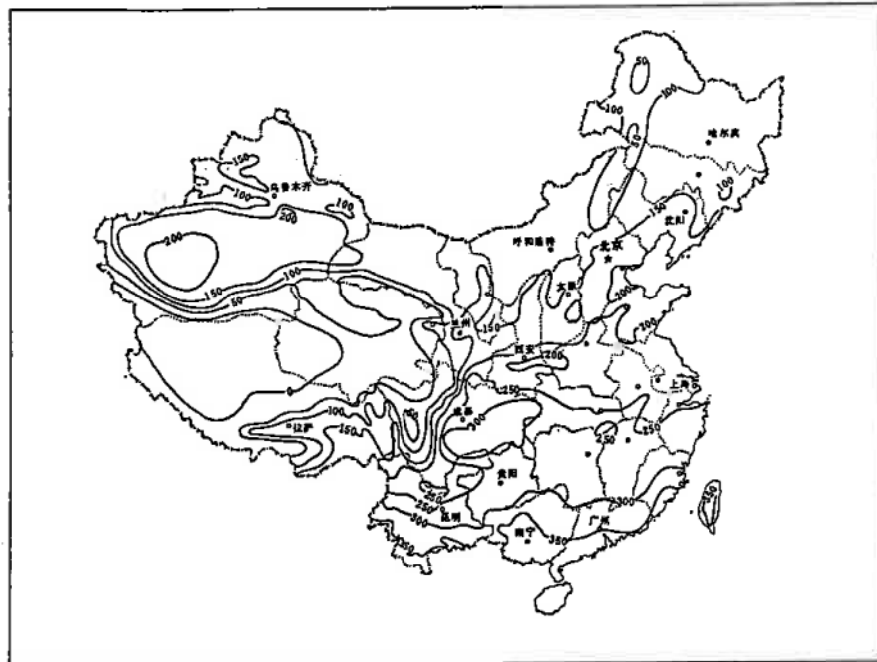
4. Isotherms - actual temperatures, January and July



Small circles represent the provincial capitals

Sources: *NEL*, 173, 175

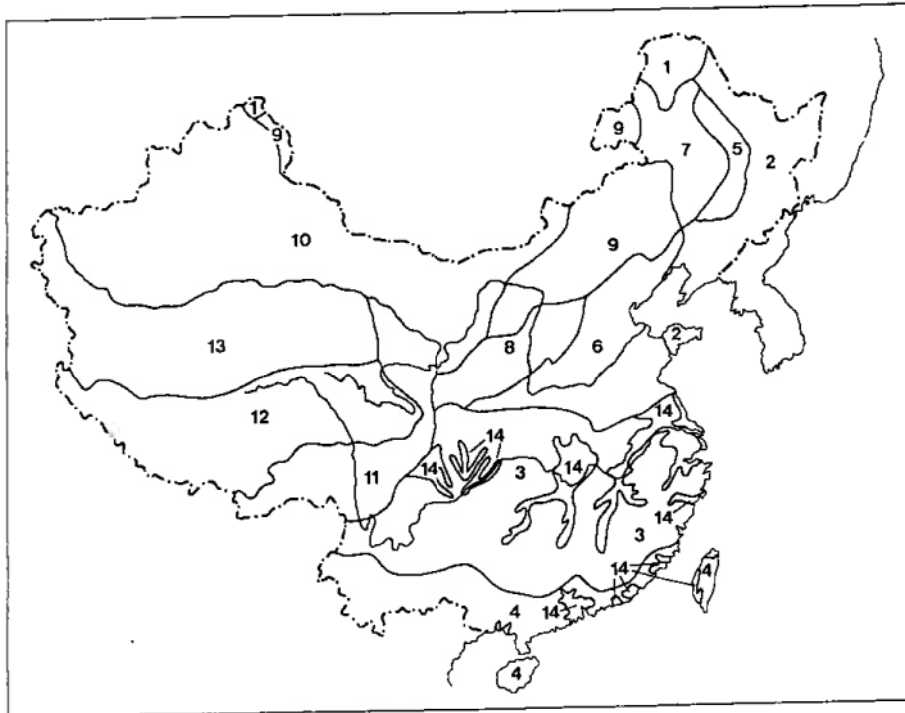
5. Frost-free days



Circles indicate provincial capitals (not all are named)

Source: JZD, 201

6. Soils



Forest soils

1. Podzolic soils
2. Brown forest soils
3. Red-earths with yellow-earths
4. Red-earths

Forest-steppe soils

5. Black-earths
6. Cinnamon soils

Steppe soils

7. Chenozems
8. Soils akin to chenzems
9. Chestnut soils

Desert and semi-desert soils

10. Brown desert soils

Mountain and plateau soils

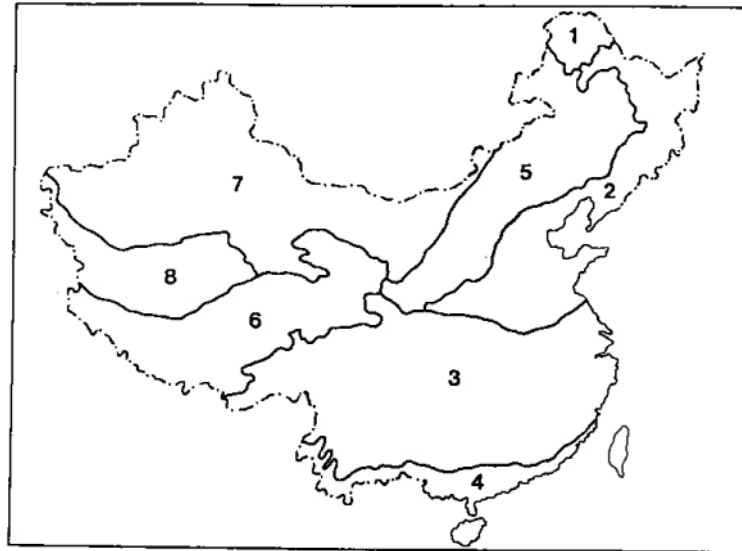
11. Mountain desert soils
12. Mountain meadow and steppe soils
13. Mountain forest soils

Man-made soils

14. Paddy soils

Source: QDC, 62-3

7. Natural vegetation



Humid forest regions

1. Cold-temperate deciduous coniferous forest
2. Temperate deciduous broad-leaf forest
3. Sub-tropical evergreen broad-leaf forest
4. Tropical rain-forest

Semi-arid grassland regions

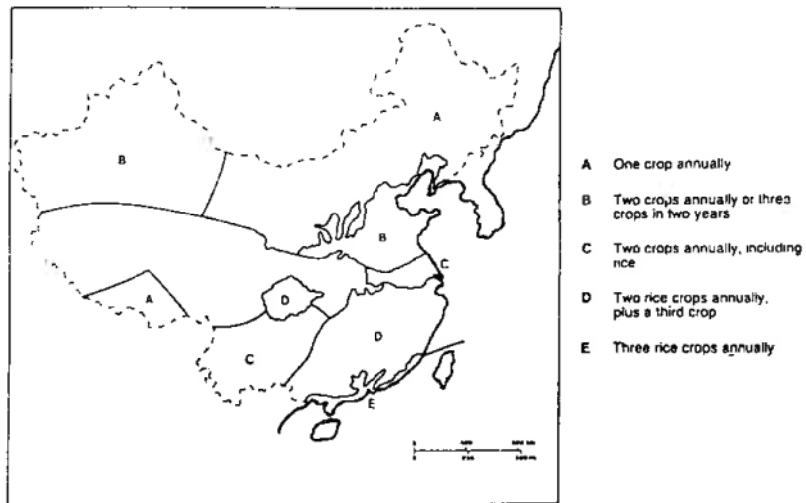
5. Temperate grassland
6. Alpine meadow

Arid desert regions

7. Temperate desert
8. Alpine desert

Source: ZDZ, ii, 28

8. Cropping sy



Cropping systems in China - key diagram. For regions D and E, triple cropping with two or three rice crops respectively, or by other methods, should be regarded as ideal and potential, and in places where realised exceptional, rather than typical in present conditions.

Crops in China

Cropping systems in China Source: Hou Xueyu 1979

Key

Group A. One crop annually, with cold-resistant economic crops

A1 (north-east)

Spring wheat, soya beans, maize, millet, sugar-beet, flax, plums, apricots, Chinese apples

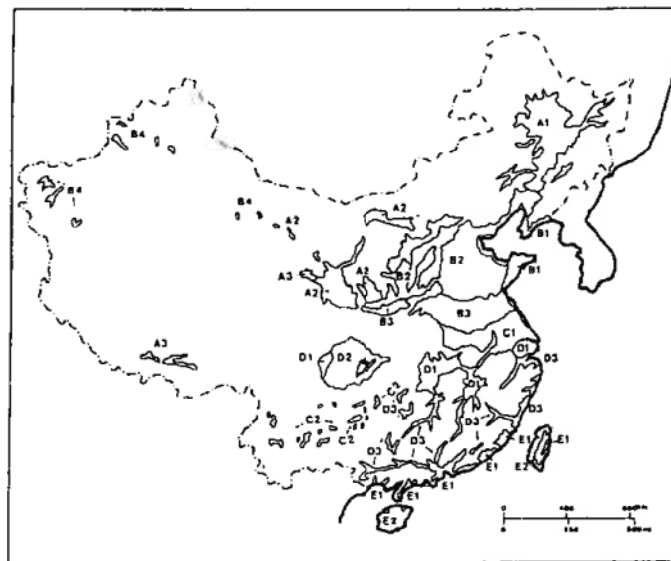
A2 (loess)

Spring wheat, millet, potatoes, sugar-beet, flax

A3 (Tibet)

Spring barley, spring and winter wheat, peas, potatoes, rapeseed

Group B Two crops annually or three crops in two years



(with rice locally), with warm-temperate economic forests and deciduous orchards.

B1 (Shandong, Liaodong)

Winter wheat, soya beans (or maize) - two crops annually; peanuts, sweet potatoes, tobacco, apples, pears, grapes.

B2 (north China plain)

Winter wheat, coarse grains (kaoliang, maize, millet) - three crops in two years; soya beans, cotton; Chinese dates; apples, pears, grapes, persimmons, chestnuts, walnuts

B3 (transition zone)

Winter wheat, coarse grains (maize, millet, sweet potatoes) - two crops annually; cotton, peanuts, soya beans; Chinese dates, apples, pears

B4 (Xinjiang)

Winter (spring) wheat, maize, millet - three crops in two years or two crops annually; cotton, grapes, melons, pears, apricots.

Group C Two crops annually (rice and a dry crop), with subtropical evergreen or deciduous economic forests and orchards

C1 (Yangzi - north)

Summer rice, winter wheat (or rapeseed) - two crops annually (double-cropping rice locally); cotton, peanuts, tea, pomegranates, peaches, pears, litchis

C2 (south-west)

Summer rice (or maize), winter wheat, (or rapeseed) - two crops annually; potatoes, tobacco, tea, lacquer, red bayberry, walnuts, apples, pears

Group D Double-cropping rice followed by a cold-tolerant crop annually, or three upland crops annually, with subtropical evergreen economic forests and orchards.

D1 (Yangzi - south)

Double-cropping rice followed by winter wheat (or rapeseed or green manure); cotton, ramie, mulberry, oranges.

D2 (Sichuan)

Single or double-cropping rice followed by winter wheat (or rapeseed) annually; sweet potatoes, peanuts, dry grains - five crops in two years: sugar-cane, ramie, oranges, tung-oil, mulberry, palm.

D3 (southern coasts, valleys)

Single or double-cropping rice followed by winter wheat (or rapeseed or green manure) annually; or sweet potatoes, dry grains, soya beans - three upland crops annually: ramie, jute, tea, tea-oil, red bayberry, oranges, loquats

Group E Triple-cropping rice annually, or double-cropping rice followed by subtropical crops, with tropical evergreen economic forests and plantation

E1 (Guangdong)

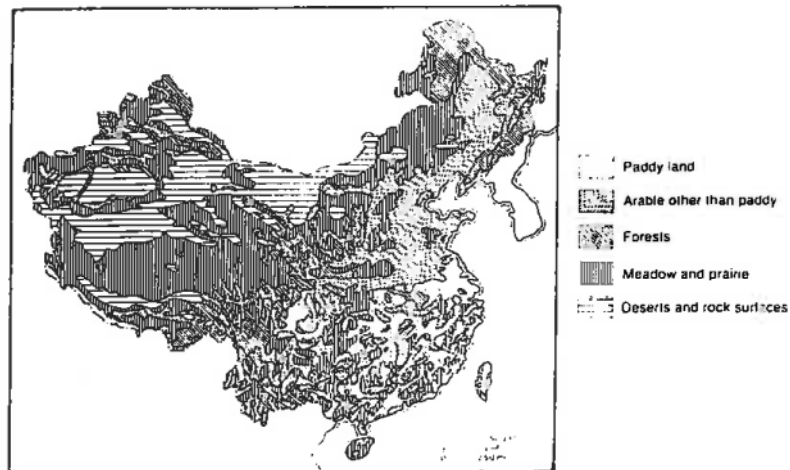
Double-cropping rice followed by sweet potatoes, double-cropping maize, sugar-cane, manioc, litchis, longans, bananas, pineapples

E2 (Hainan)

Triple-cropping rice, winter peanuts, sugar-cane, vanilla, sisal, rubber, coconuts, coffee, oil palm.

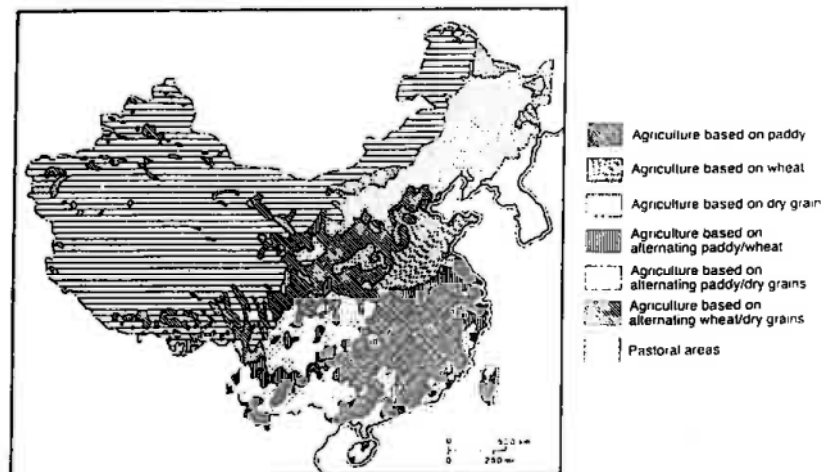
Other areas - agriculture local and scattered or absent

9. Rural land use



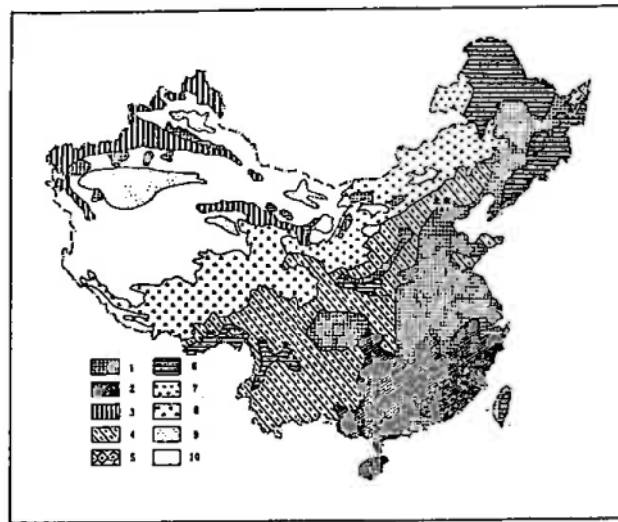
Rural land use in China. Source: *Zhongguo ditu* 11

10. Agricultural systems



Agricultural systems in China. Source: *Zhongguo ditu* 15

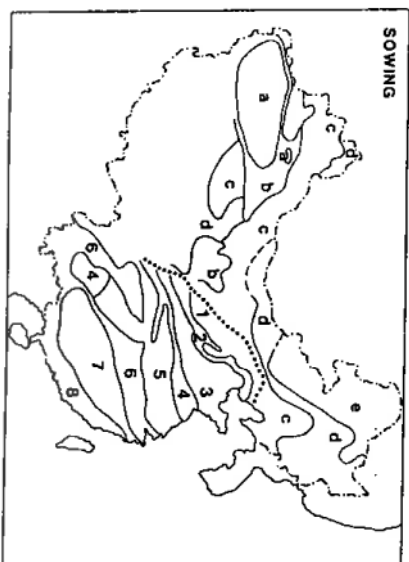
11. Land resources



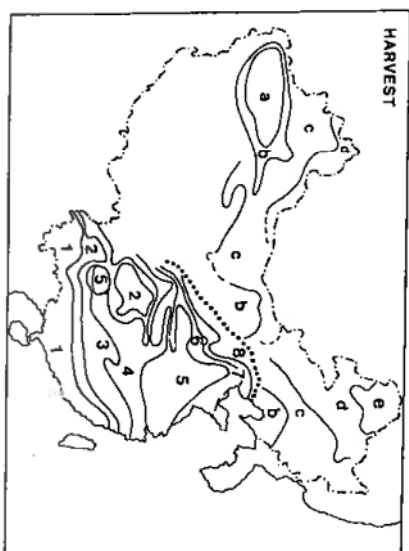
1. Arable land
2. Mixed arable and woodland
3. High mountain forest and prairie
4. Mixed forest, arable and wasteland
5. Marsh
6. Major forest areas
7. Prairie
8. High-elevation cold prairie
9. Sand seas
10. Rock and other desert surfaces

Source: JZD, 217

12. Isopleths of dates of sowing and harvest of winter and spring wheat



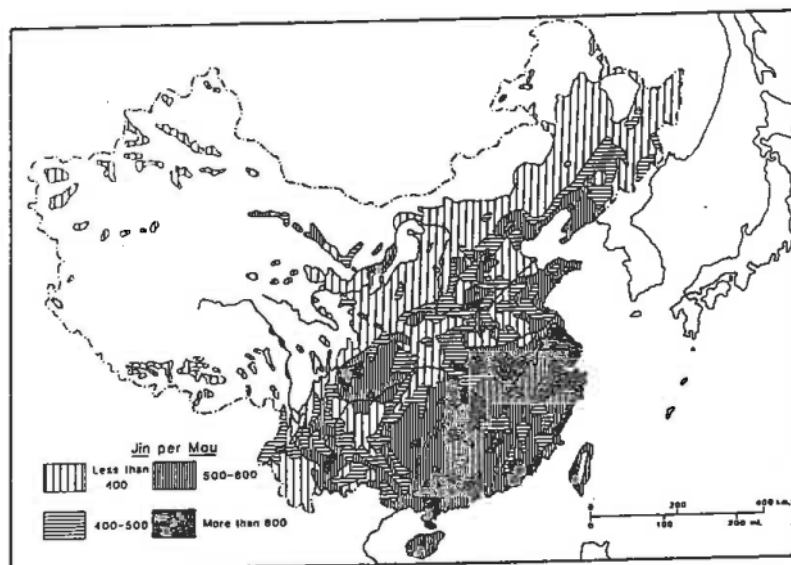
1. Mid-September
2. Late September
3. Early October
4. Mid-October
5. Late October
6. Early November
7. Mid-November
8. Late November
- a. Late February to early March
- b. Early to mid-March
- c. Mid- to late March
- d. Early to mid-April
- e. Mid- to late April



1. Late February to mid-April
2. Late April
3. Early May
4. Mid-May
5. Late May
6. Early June
7. Mid-June
8. Late June
- a. Mid- to late June
- b. Early to mid-July
- c. Mid- to late July
- d. Early to mid-August
- e. Mid- to late August

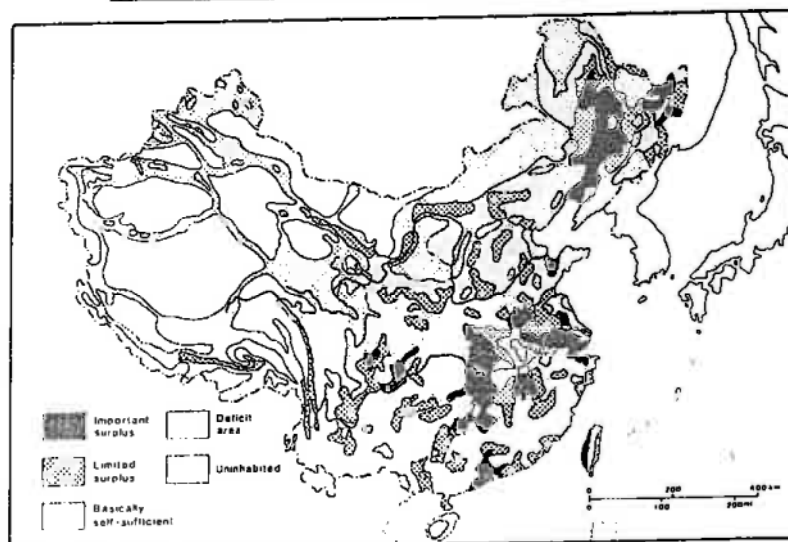
Note: In both maps the dotted line indicates the boundary between spring-sown and winter-sown wheat
Source: Zhu Kezhen and Man Minwei, 53, 54

13. Grain yields per unit area, 1975



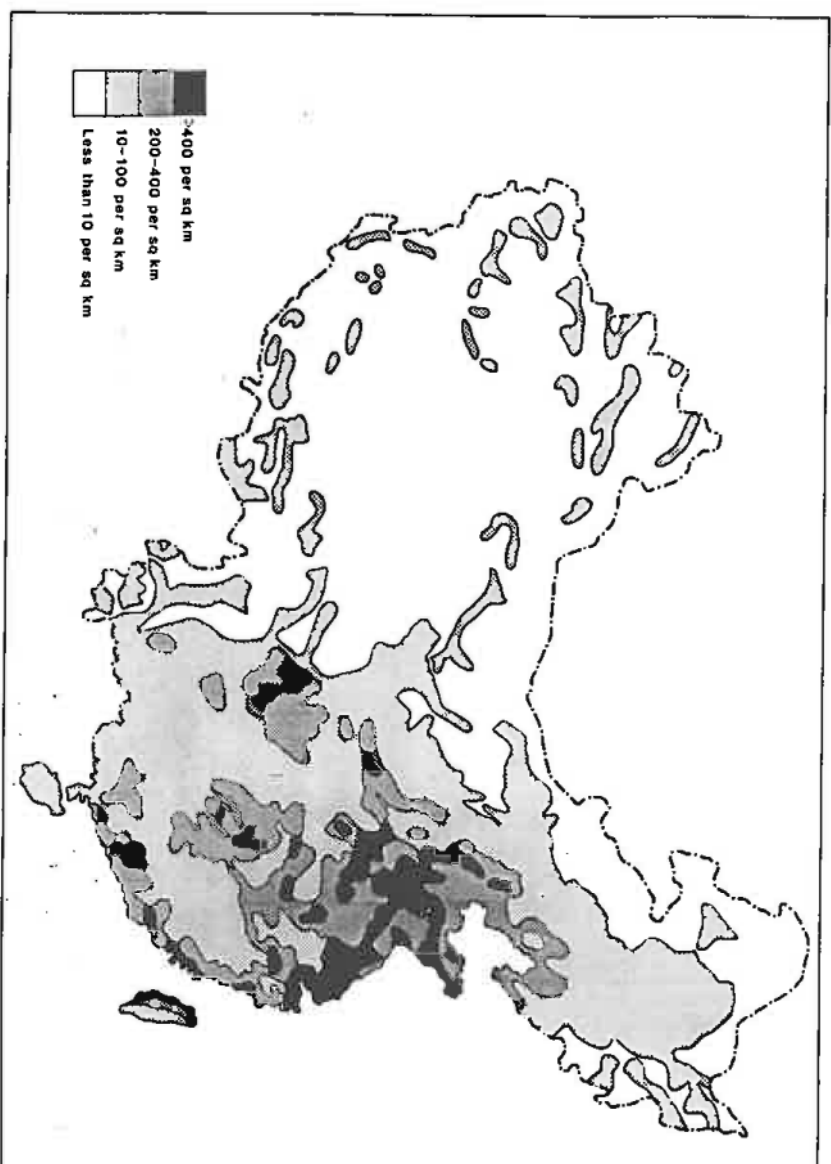
Grain yields per unit area, 1975. Source: Geographical Research Institute: 121.

14. Areas of surplus and deficit in grain output



Areas of surplus and deficit in grain output. Source: Geographical Research Institute: 121.

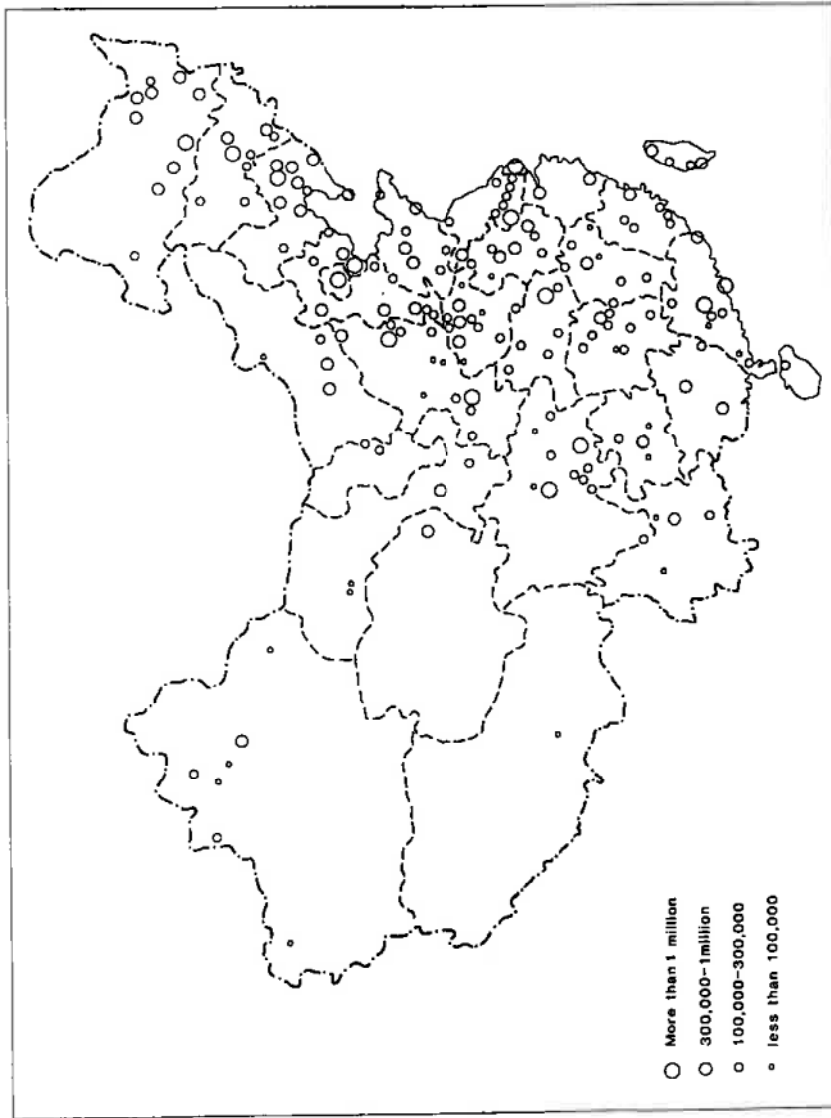
15. Rural population densities



Note: No date is given for the original from which this map has been made. It was prepared before 1978 and probably relates to a notional figure for total Chinese population of the order of 800 millions.

Source: *Zhongguo ditu*, 7.

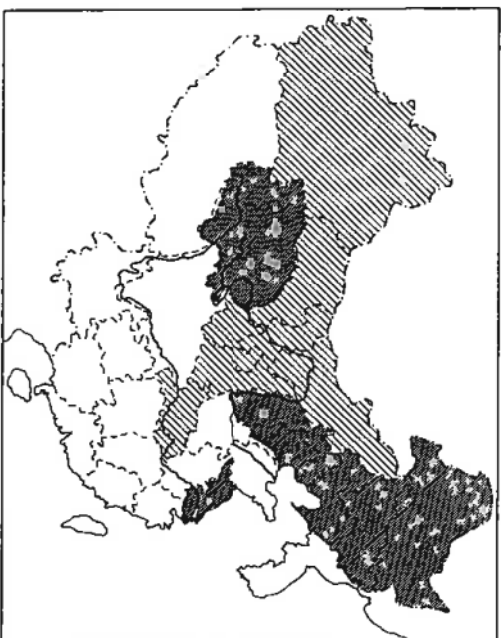
16. Urban populations



Note: No date is given for the original from which this map has been made. It was prepared before 1978 and probably relates to a notional figure for total Chinese population of the order of 800 millions.

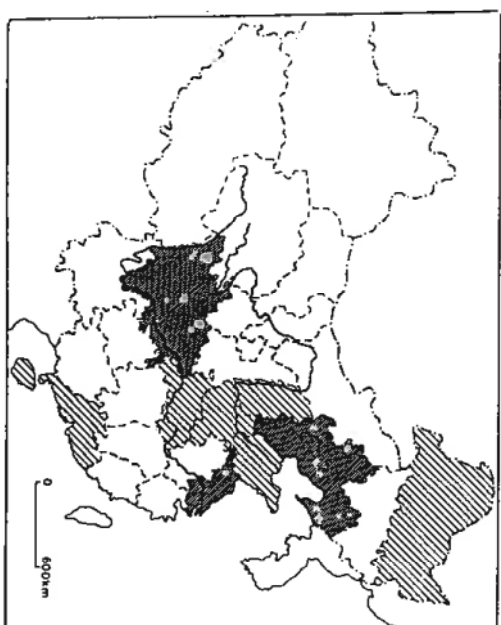
Source: *Zhongguo dilu*, 7.

17. Chinese industry - industrial jobs per 100 population, by provinces



More than 6
Between 4 and 6

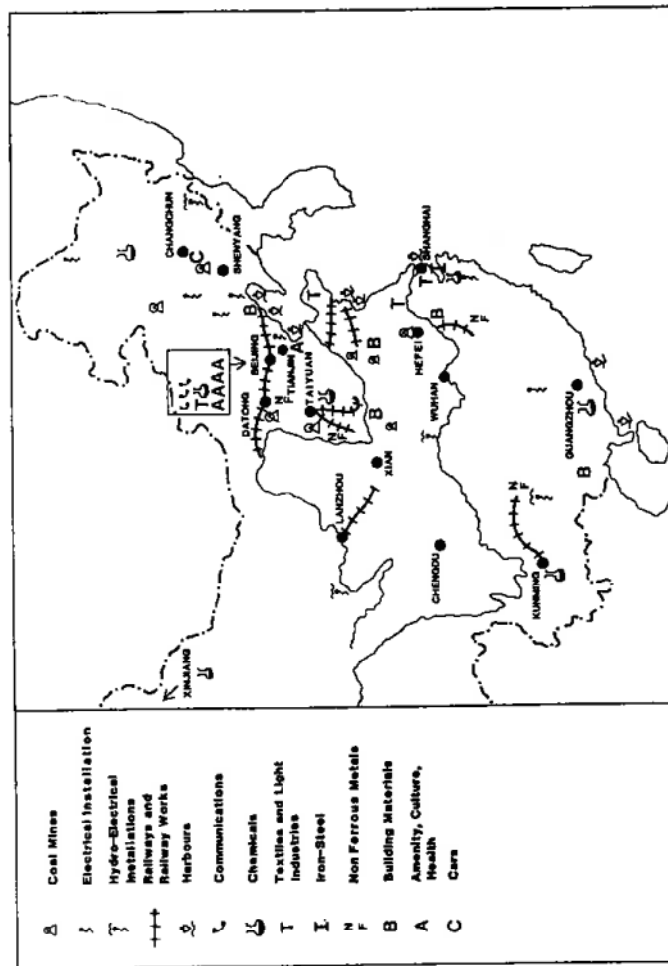
18. Chinese industry - proportions of national total of industrial jobs, by provinces



More than 6%
Between 4% and 6%

Source: Table 2.2 in *Selected Chinese Statistics*, (Leeds School of Geography Working Paper 406), based on figures in ZTN 83.

19. Sixty-eight large and medium projects under the sixth five-year plan
(1981-86)



Note: A number of these projects are second or subsequent stages of installations already in existence, major improvements such as double-tracking or electrification of railways already in use, etc.

Source: *JC 1983*, 43.

SOURCES

- Geographical Research Institute : *Zhongguo nongye dili zonglun* (Agricultural geography of China), Science Press, Beijing, 1980.
- Hou Xueyu 1979 : *Zhonghua renmin gongheguo zhibei ditu* (Map of vegetation cover of the People's Republic of China), Cartographic Publishing House, Beijing.
- JC 1983 *Jinmin Chugoku* 1983(9), Beijing and Tokyo.
- JZD *Jianming Zhongguo dili* (Short geography of China) by a group at the Shanghai Teachers' University, People's Publishing House, Shanghai, 1974.
- QDC *Qingnian ditu* (Atlas for youth), Cartographic Publishing House, Xian, 1978.
- ZDZ *Zhongguo dili zhishi* (Geographical knowledge of China), Shangwu, Beijing, 1973.
- Zhongguo ditu* (Atlas of China), Cartographic Publishing House, Shanghai, 1978.
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- ZTN 1983, *Zhongguo tongji nianjian* (Statistical Yearbook of China, 1983), State Statistical Bureau, PRC, Hong Kong, 1983.