



China's Rice Economy and Policy: With Implications to WTO Entry

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Major contents

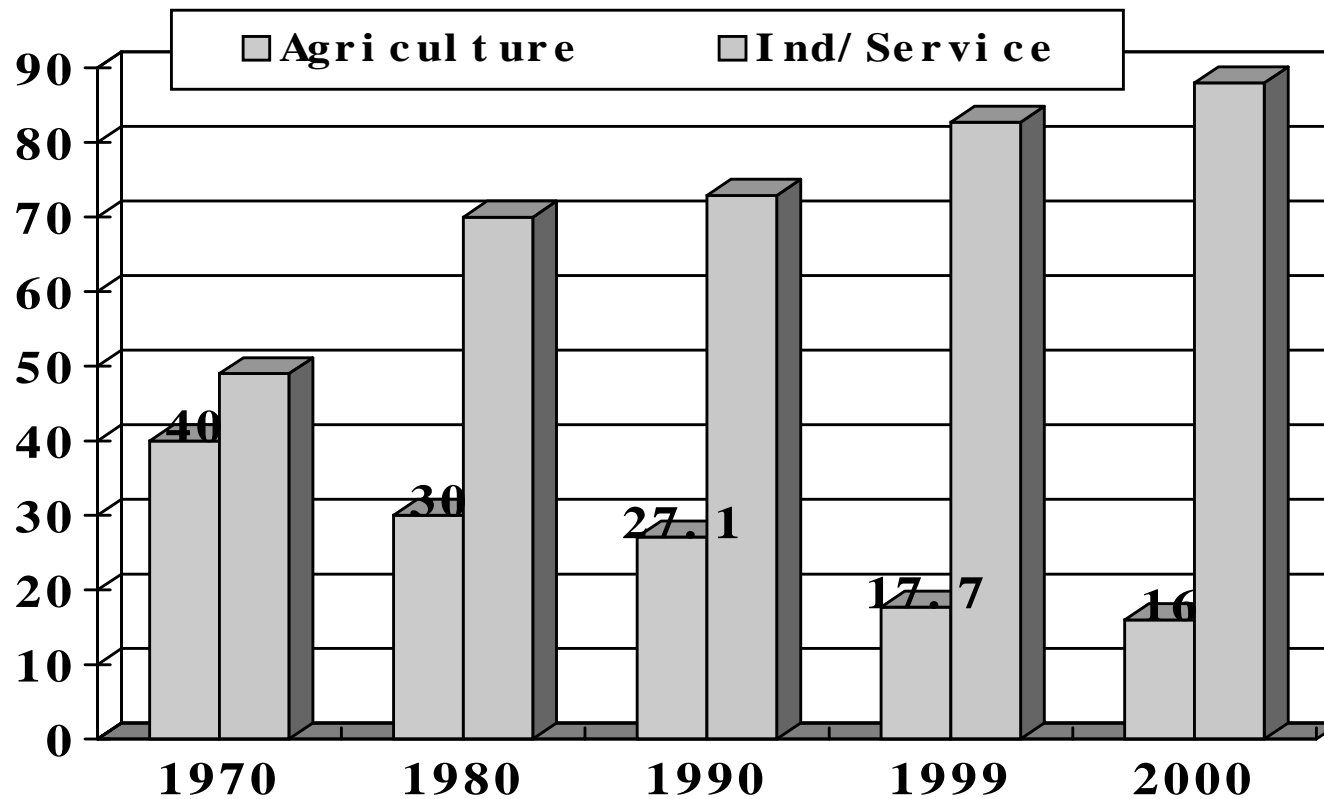
- China's agriculture in general
- Rice economy
- Government policies
- Projections on rice supply & demand
- Major challenges



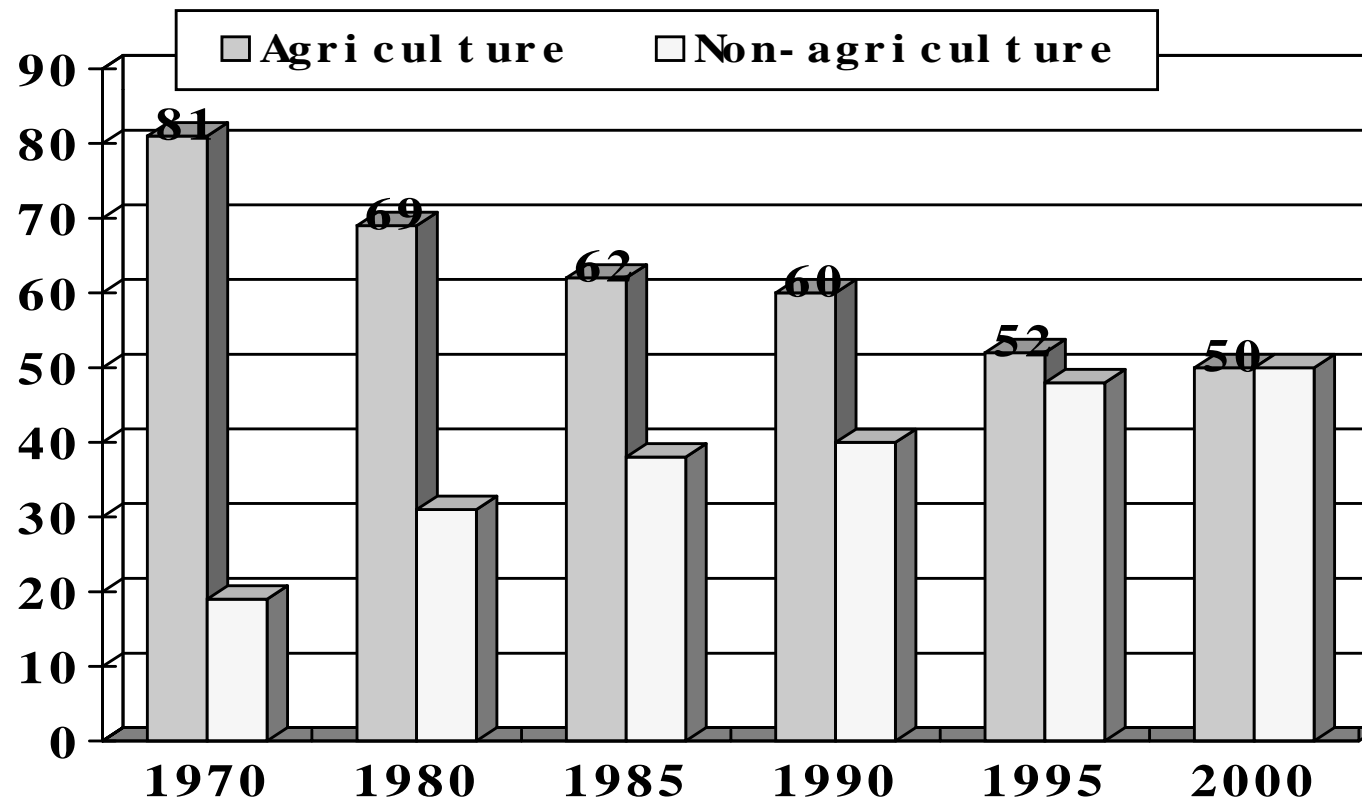
China's agriculture in general

- Basic characteristics of agriculture:
 - Small scale & individual household operating production system
 - Collective ownership of land
 - Semi-subsistence
- But, its role is changing....

Changes in Structure of Economy-GDP (%)



Changes in Structure of Economy - employment(%)





China's rice economy

- Rice has been the most important crop in China
 - 27-29% share in grain sown area
 - 41-45% share in grain production
 - 40% of caloric intake
 - Nearly $\frac{1}{4}$ of the world sown area
 - More than $\frac{1}{3}$ of the world production

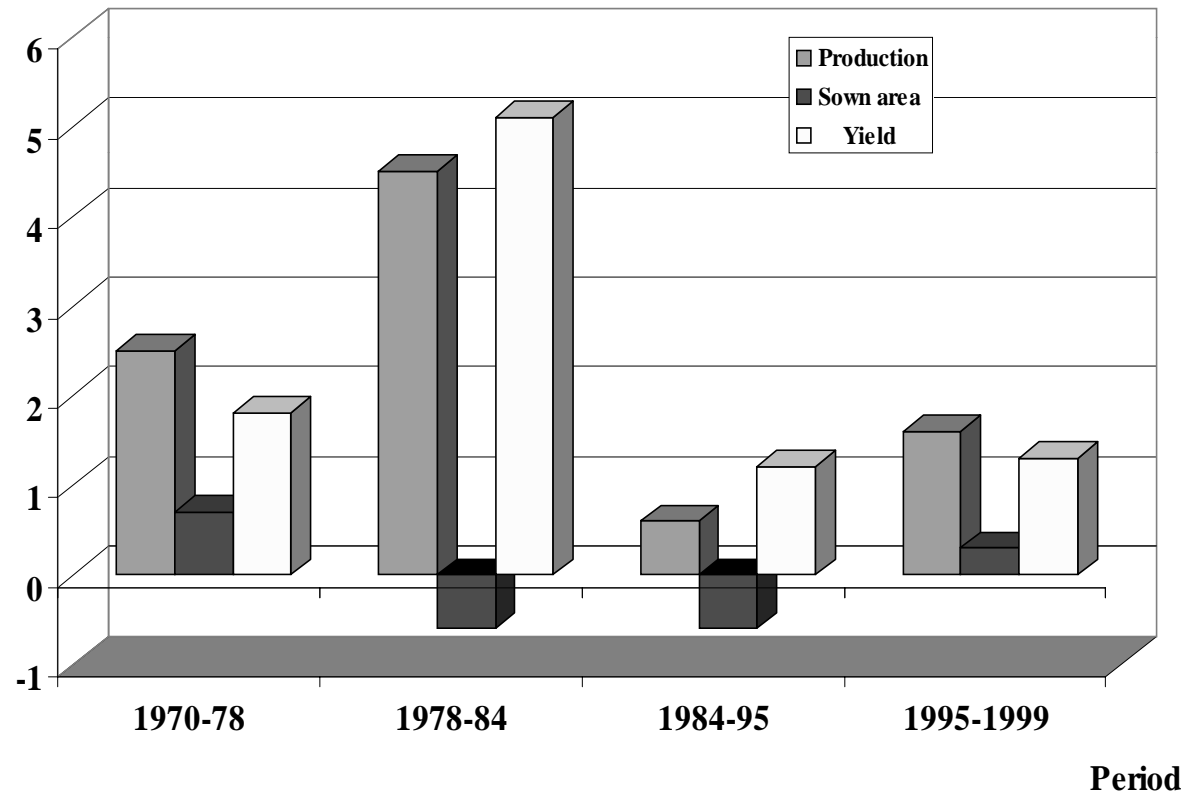


China's rice economy

- Rice yield is still among the highest in the world,
- Much of the increase in yield were due to the introduction of improved varieties,
- By early 1980s, 98% of rice grown in China were improved varieties, both conventional and hybrid.

Growth of rice

Growth rates of rice



Structural change of rice production

| Year | Area shares by | | Shares by region | | Hybrid rice area share |
|------|----------------|----------|------------------|-------|------------------------|
| | Indica | Japonica | South | North | |
| 1980 | 89 | 11 | 94 | 6 | 14 |
| 1985 | 88 | 12 | 93 | 7 | 26 |
| 1990 | 84 | 16 | 90 | 10 | 49 |
| 1995 | 79 | 21 | 89 | 11 | 52 |
| 2000 | 73 | 27 | 86 | 14 | 50 |

Rice supply and demand

| | Units | 1980-84 | 1985-89 | 1990-94 | 1995-99 |
|-----------------------|------------------|----------------|----------------|----------------|----------------|
| Area harvested | 1000 ha | 33312 | 32232 | 31654 | 31283 |
| Yield | tons/ha | 3.33 | 3.75 | 4.04 | 4.38 |
| Production | 1000 tons | 110961 | 121023 | 127794 | 136957 |
| Stock change | 1000 tons | -1652 | -2297 | -2865 | 2072 |
| Net import | 1000 tons | -621 | -288 | -803 | -912 |
| Import | 1000 tons | 159 | 518 | 183 | 630 |
| Export | 1000 tons | 780 | 806 | 986 | 1542 |
| Consumption | 1000 tons | 111992 | 123032 | 129855 | 133973 |



Rice consumption

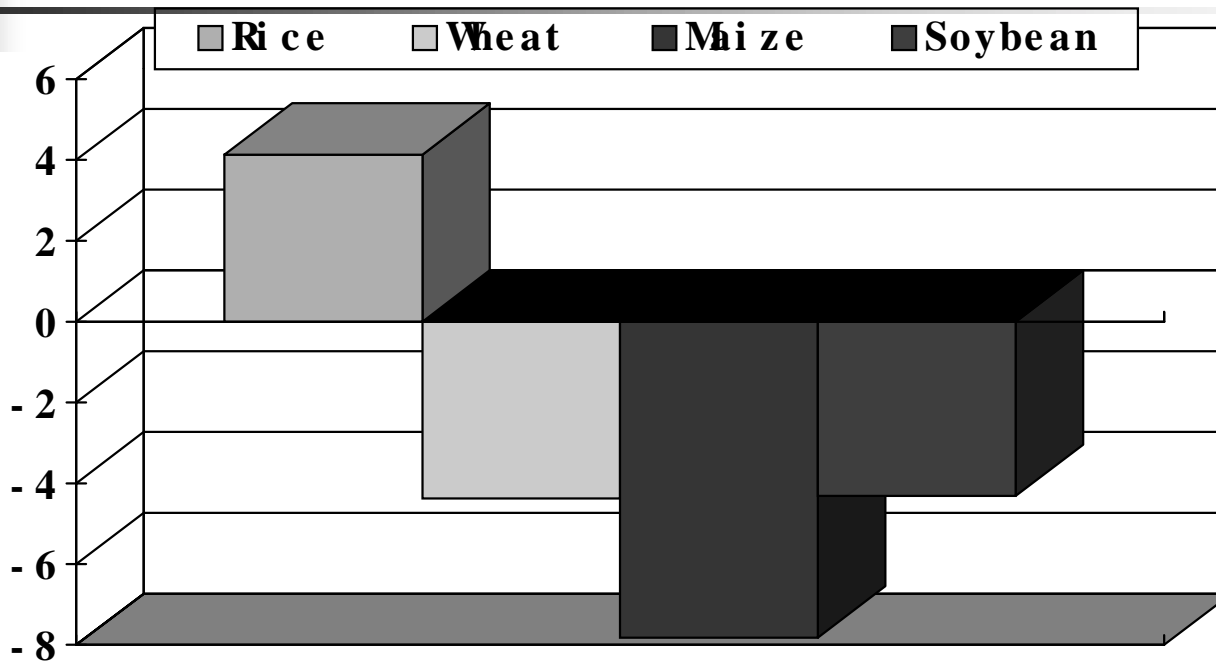
| | | 1980-84 | 1985-89 | 1990-94 | 1995-99 |
|------------------------------|------------------|-----------|------------|------------|------------|
| Per cap food | kg/person | 92 | 95 | 94 | 92 |
| Urban | kg/person | 81 | 74 | 67 | 64 |
| Rural | kg/person | 95 | 102 | 104 | 104 |
| Self-sufficient level | % | 99 | 98 | 98 | 102 |

Projections on rice S&D

| | 2005 | 2010 | 2020 |
|--------------------------------|------|------|------|
| Baseline: WTO regime: | | | |
| Grain: Production (mmt) | 457 | 476 | 507 |
| Net import (mmt) | 11 | 28 | 49 |
| Demand (mmt) | 468 | 504 | 556 |
| Self-sufficiency (%) | 98 | 94 | 91 |
| Rice: Production | 143 | 147 | 154 |
| Net import (mmt) | -4 | -6 | -12 |
| Demand (mmt) | 137 | 141 | 142 |
| Self-sufficiency (%) | 104 | 104 | 109 |

Impact of TradeLib on Production

(%, in 2005)





Result

- While other grain crops are likely to reduce its production,
- Rice production is likely to be more than its domestic consumption needs, thus, its export is likely to expand.



Policy interventions

- Technology
- Irrigation investment
- Marketing and pricing

In the past, rice sector has been heavily penalized by the price and marketing policies and macro-policies



Challenges in rice sector

- Reduced efforts on agricultural R&D,
- Shifts of consumer preferences with the increased income,
- Increase in opportunity labour costs
- High level of inputs, such as fertilizer and pesticides caused environmental concerns..

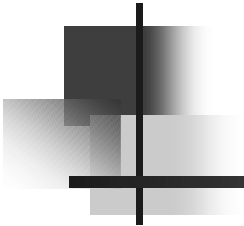
China's WTO commitment

| | Import volume (MMT) (State trading share, %) | | | Quota growth (% pa) | In-quota tariff (%) | Out-of-quota tariff (%) (%, as of 1 January) | | |
|--------------------------|---|---------------|---------------|---------------------------|------------------------|---|------|------|
| | Actual 2000 | Quota 2002 | Quota 2004 | | | 2002 | 2003 | 2004 |
| Rice | 0.24 (100) ^a | 3.76 (50) | 5.32 (50) | 19 | 1 | 74 | 71 | 65 |
| Wheat | 0.87 (100) | 8.45 (90) | 9.64 (90) | 8 | 1 | 71 | 68 | 65 |
| Maize | 0.0 (100) | 5.70 (67) | 7.20 (60) | 13 | 1 | 71 | 68 | 65 |
| Cotton | 0.05 (100) | 0.82 (33) | 0.89 (33) | 5 | 1 | 54.4 | 47.2 | 40 |
| Wool ^b | 0.30 | 0.34 | 0.37 | 5 | 1 | 38 | 38 | 38 |
| Edible oils ^c | 1.79 (100) | 5.69 (40) | 6.81 (10) | 15 | 9 | 75 | 71.7 | 68.3 |
| Sugar ^d | 0.64 | 1.68 | 1.95 | 8 | 20 | 90 | 72 | 50 |



Concluding remarks

- Although China made substantial commitments in WTO entry,
- It is very unlikely that rice sector is much benefited by this.
- Other issues need more attention.



Thank you!