

# The typical farm CN5XI in the Hubei province, China

## Farm Structure in China in 2009

	Family farms	State farms
Number of farms (1,000)	209,000 <sup>1)</sup>	1.8
% of farms	99.9 %	0.1 %
Cultivated area per farm (ha)	0.56	3,080
% of farming area	95.4 %	4.6 %

Sources: China Statistical Yearbook 2010 & <sup>1)</sup> Population Census of China 2000

So far, two distinct farm types can be found in China.

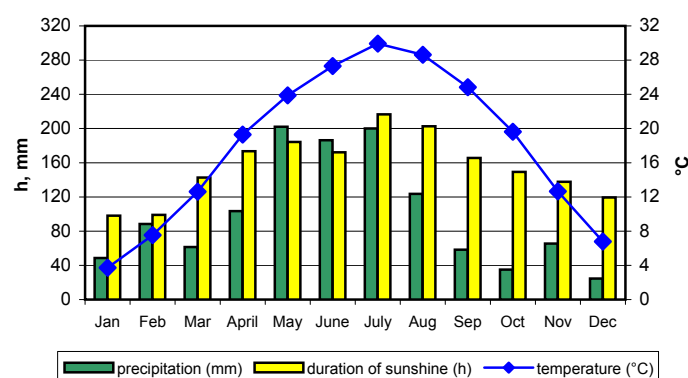
In rural areas 209 Mio. family farms cultivate more than 95 % of the agricultural crop land. On average across the nation a farming household cultivates 0.56 ha of land. Depending on the land availability in a province, this differs between 0.1 and 0.7 ha per farmer. In Hubei province, where the typical farm is located, a farmer can on average cultivate 0.15 ha. Officially, the land is owned collectively by rural communities but farmers are allowed to use it

individually. Already at birth a child grown into a rural household has the right to get arable land and thus the family increases its cultivated area.

In 2009, roughly 1,800 state farms were in operation which on average cultivate an area of 3,080 ha. In recent years, the number of state farms has reduced and the remainder have increased in size. Even though they are large farms using modern machinery, the government was not satisfied with their efficiency and organizational structure. Therefore, the government has started a reform process whose outcome is still uncertain. It may depend on the endowment of the respective state farms with machinery, buildings etc. and the interests of the workers employed.

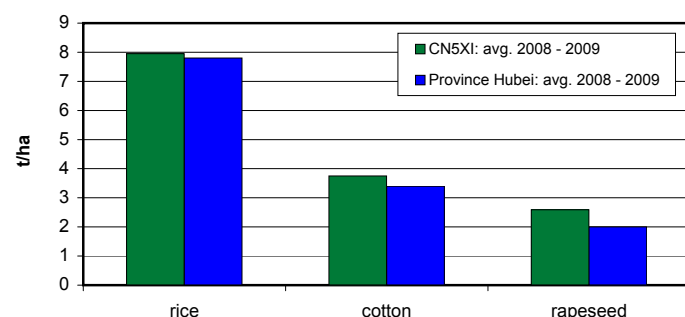
Unlike in other countries, it is not easy to tell how many Chinese farms are crop, animal or mixed farms. Many family farms keep chicken or pigs but may decide differently from year to year depending on the market and household situation. The typical agri benchmark farm for China was designed as a pure cash crop farm.

## Mean climate data 2004 - 2009 Wuhan



Source: China Statistical Yearbook 2010

## Comparison of average yields

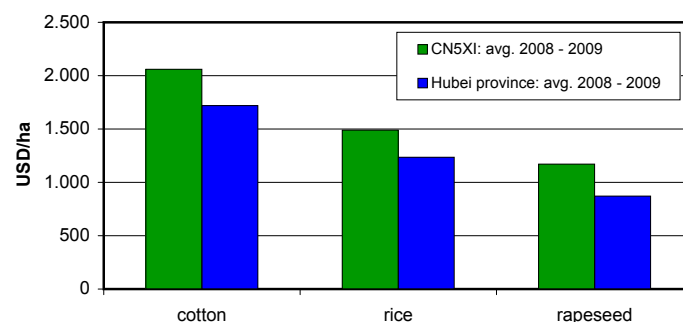


Sources: China Statistical Yearbook 2010, agri benchmark 2010

The typical farm has better soils than the average of Hubei province. Furthermore, farm management is better and thus the obtained yields per harvest are slightly above the ones obtained in the province.

The typical farm in Hubei is situated close to Wuhan, the province capital. Average temperatures during the short winter range between 4 - 6 °C, while July is the hottest month with up to 30 °C on average. Precipitation (total ~ 1,200 mm) is unevenly distributed. Between April and August 70 % of the rainfall occurs with on average 160 mm/month. This subtropical climate allows for 2 - 3 harvests per year.

## Gross margin comparison



Source: National Development and Reform Commission 2010, agri benchmark 2010

When comparing gross margins, the difference between CN5XI and the farm average of Hubei province increases slightly. In all three crops the typical farm performs better. This is because of the higher yields (see left) and due to better and more efficient management.