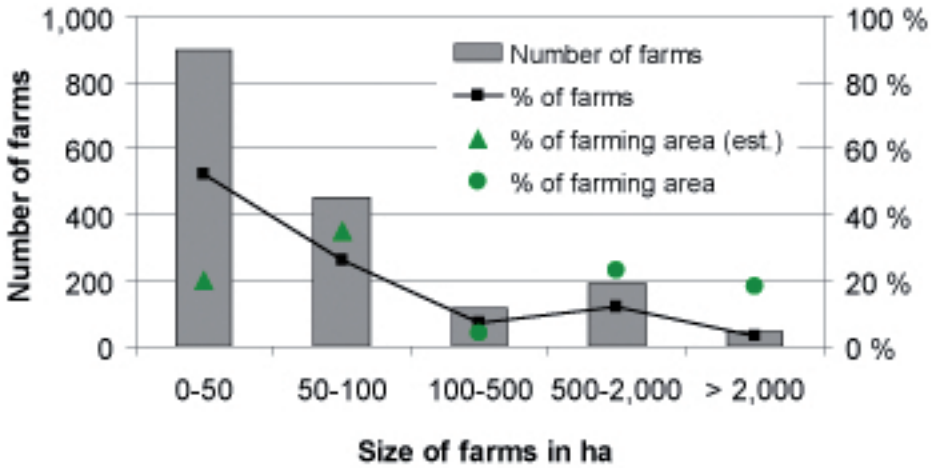
The typical farm UA2500ZH in the region Zhytomir, Ukraine

Farm structure – Zhytomir oblast (2008)

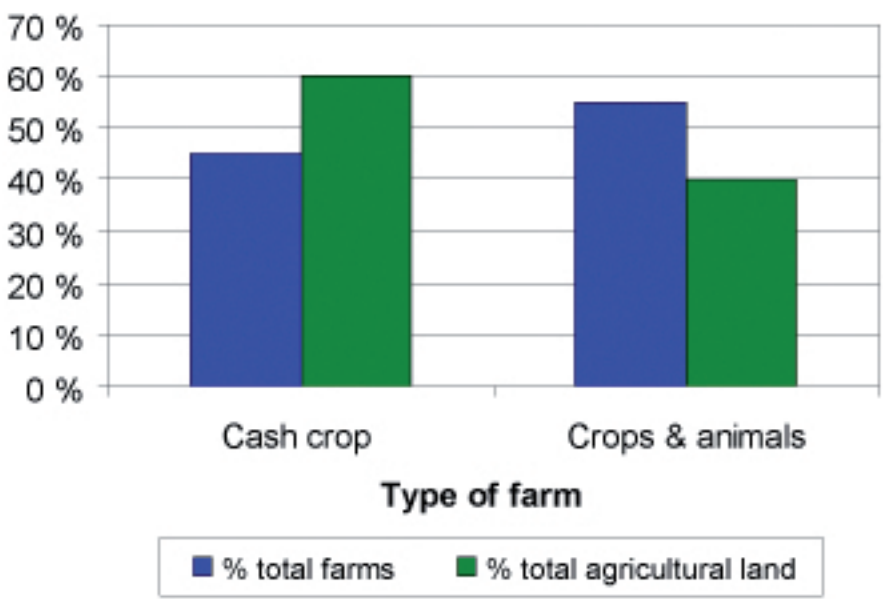


Source: Own calculations of UCAB based on SSC data

To obtain reliable data on the traditional "post-kolkhoz" farms is a real challenge. Therefore, in a first attempt only individual farms within agroholdings – top performing in the national context – have been chosen to be used in the *agri benchmark* comparison.

Though 20 years have passed after the collapse of the communist regime, the structure of Ukraine's farms is still very much influenced by its history. There are thousands of small household land plots mostly for subsistence needs, a large number of small individual farms (usually around 100 ha), about 8,000 bigger "post-kolkhoz" farms (often around 2,500 ha) that bring the biggest share of the national output and a few dozens of agroholdings, comprising several thousands of hectares. This structure is also reflected in Zhytomir oblast (ZH). The Ukrainian Agribusiness Club (UCAB) estimates that 41 % of the agricultural land in ZH is cultivated by farms larger than 500 ha. Therefore, *agri benchmark* considers 2,500 ha as farm size for this region.

Farm classification Zhytomir oblast (2008)
- based on gross revenue shares

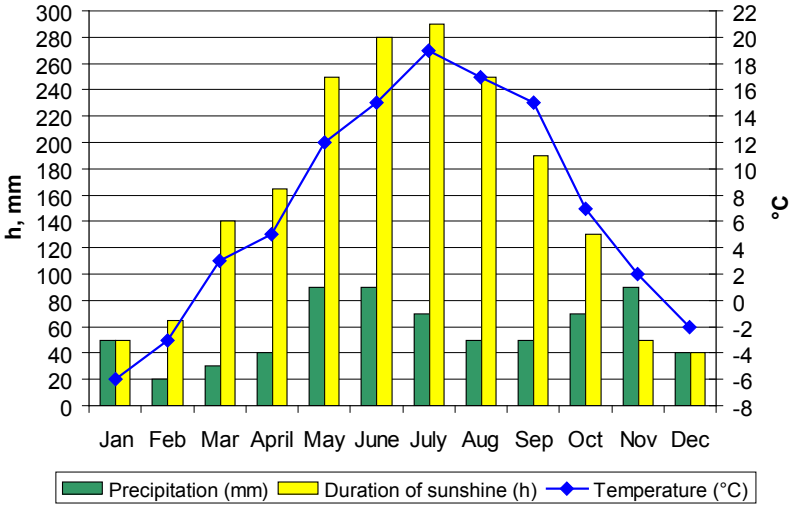


Having their roots in the Soviet age many of today's agricultural enterprises are mixed farms, i.e. they generate about two-thirds of their total revenue from crop and the rest from livestock production (milk or meat) or the provision of services.

Also UA2500ZH was selected in such as way that it contains livestock production including the provision of fodder crops.

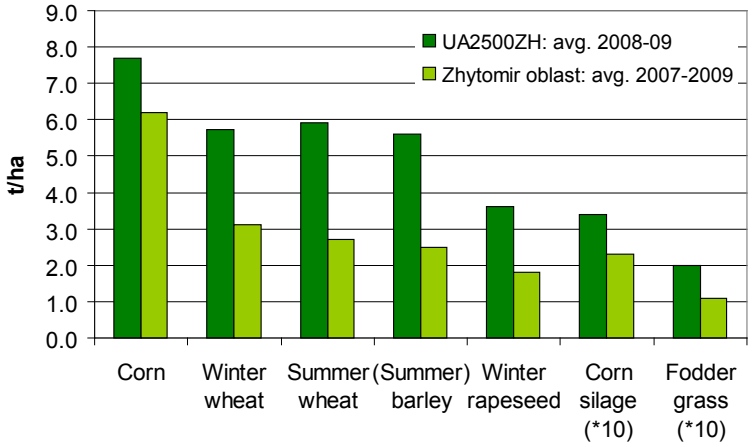
Source: Own calculations of UCAB based on SSC data

Mean climate data 2001 – 2006 Zhytomir



Zhytomir region, approximately 500 km away from the Black Sea, has a moderate climate and good soils. Average temperatures during winter can fall below zero, while July is the hottest month with up to 19° C on average. Precipitation is distributed in a favorable way, with highs (90 mm/month) during May-June and November.

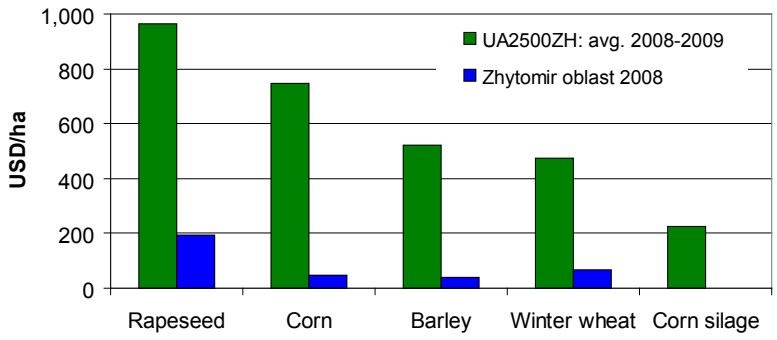
Comparison of average yields



Source: State Statistics Committee of Ukraine, UCAB and agri benchmark 2010

The pre-panel typical farm UA2500ZH is situated in the south of Zhytomir oblast. There, at the edge between the forest zone in the north and the forest steppe zone in the center, arable farming can obtain highest yields. According to the official statistics UA2500ZH had much better yields than the local averages, which were calculated across all farm types and structures. Besides good growing conditions the farm uses more fertilizer than on average, modern seeds and machinery. Thus, it could realize 80-120 % more wheat, barley and rapeseed. In corn the difference was not as big (20 %).

Gross margin comparison



Source: Own calculations of UCAB based on SSC data, agri benchmark 2010

When comparing gross margins, the huge difference between UA2500ZH and the farm average of Zhythomir region becomes even more apparent. In all crops the agroholding performs excellent. This is because of higher yields (see left) and due to better and more efficient management. However, the results displayed in the graph need to be qualified since gross margin for the *agri benchmark* farm is calculated across two years while Zhytomir oblast data was available for one year only, 2008. Further, in October – December 2008 when most "normal" farms had to sell their harvest to pay loans, they could realize only very low prices (50 - 60 % lower than 3 months earlier).

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