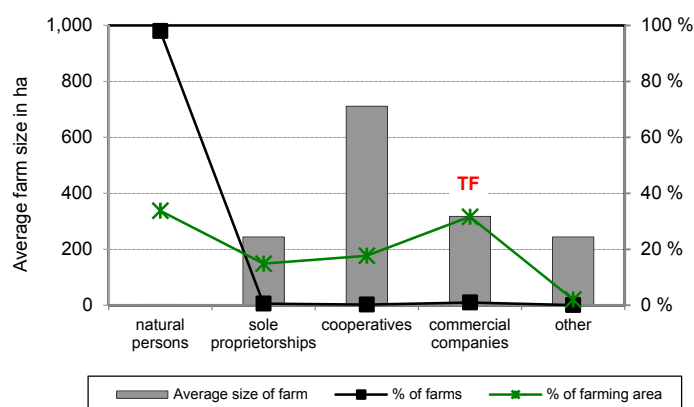


# The typical farm BG5500PLE in Pleven province, Bulgaria

## Farm structure in Bulgaria 2010



Source: Bulgarian Ministry of Agriculture and Food, 2011

Data on the structure of Bulgarian farms is available only at national level. In 2010, 91 % of agricultural holdings utilized between 0 and 4.99 ha of agricultural area. Over 78 % of the utilized agricultural area is located in holdings with an area of 100 ha or more.

Looking at the legal status of the farms, holdings owned by individuals account for 98 %, followed by those owned by commercial companies (1 %), sole traders (0.6 %), co-operatives (~0.3 %) and other holdings (~0.1 %). Natural persons manage 33.8 % of the utilized agricultural area, commercial companies 31.6 %, cooperatives 17.7 %, sole traders 14.9 % and the remaining holdings 2 %.

Over 751,000 people worked on agricultural holdings in 2010. Of these, 697,000 belong to the category of family labor.

Against this background, the typical farm is a commercial company holding cultivating around 5,500 ha in the 2011/12 agricultural year.

## Farm classification/type

86.5 % of the utilized agricultural area (3.62 million ha) is arable land, followed by permanent grassland (10.4 %) and permanent crops (2.8 %).

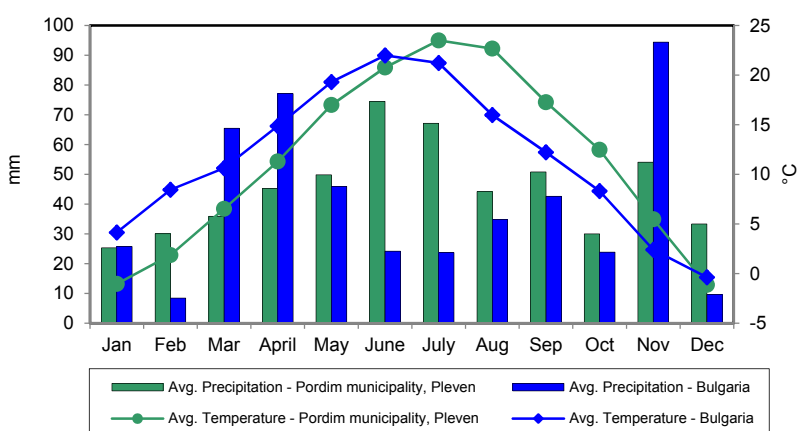
The arable land is divided into 250,900 holdings. Cereals are grown on 47.8 % of the holdings, representing 58.1 % of the arable land. Industrial crops occupy 33.9 % of the arable land and are grown on 23.1 % of the holdings possessing arable land. Most industrial plants are grown in the

Northwest region. Vegetables occupy 1.2 % of the arable land and are grown mainly in the South Center region.

As per 2007 data from Eurostat, 29.2 % of the land is cultivated by mixed farms engaged in crop and livestock production.

Consequently, the typical farm was constructed as cultivating cereals and industrial crops.

## Average climate data 1990 - 2007

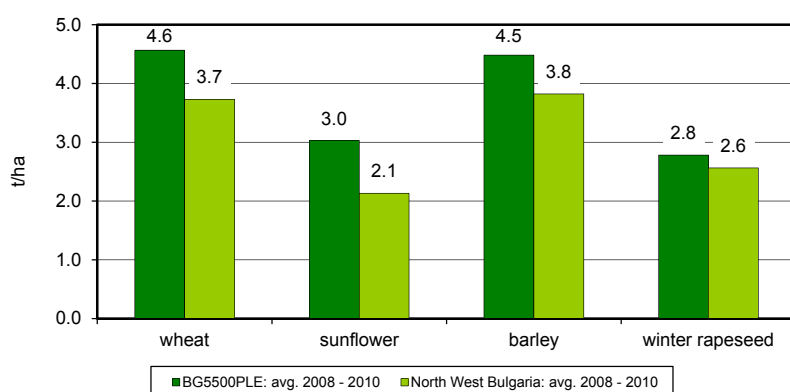


Source: The World Bank Group, Climate change knowledge portal 2012

The annual average temperature depends on the latitude and ranges from 8 °C in the North and 11 °C in the South, with temperatures of 2.6 °C in the mountains and 12 °C in the plains. Typical precipitation is 630 mm but varies between less than 450 mm in the lowland north east to over 1,000 mm in the highest mountain regions. The lowlands receive snowfall from mid-October to mid-March (snow can fall up to May in the highest mountain regions only) with an annual average of 25 - 30 days of snow cover. The highest peaks, above 2,800 m, have a snow cover throughout the year.

The typical farm is situated in the moderately continental climatic zone with large temperature variations from -15 °C to +40 °C. The average precipitation for the period 1990/2007 is 540.7 mm and the average temperature is 11.4 °C.

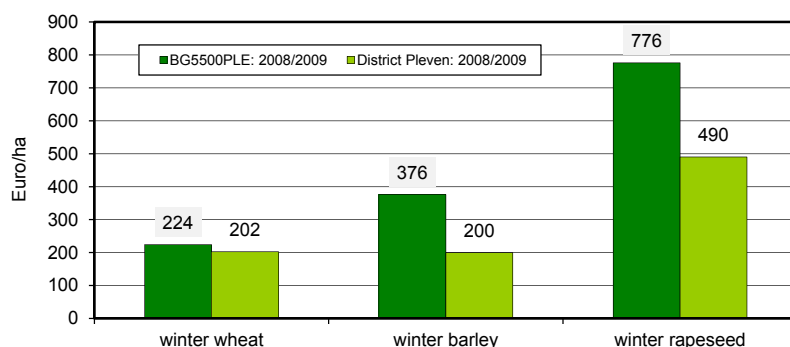
## Comparison of average yields



Source: Bulgarian Ministry of Agriculture and food, 2011; agri benchmark 2011

The graph above refers to the main crops grown by the typical farm. In all four crops, the typical farm obtains higher yields than the regional average. The lower regional average yields are understandable as poorly conducted land restitution and farm privatization after 1990 as well as general economic conditions (unavailable capital, decrease in inputs) resulted in a severe drop of the agricultural output. Land fragmentation is extreme and considered as an obstacle for the development of a healthy agricultural sector. The wheat yield of the typical farm is a mix of wheat grown after rapeseed (4.9 t/ha) and wheat grown after wheat (4.1 t/ha).

## Gross margin comparison



Source: Ceres research, agri benchmark 2011

For a comparison of gross margins only the year 2008/09 was considered since this is the only year gross margin data from other farms in the Pleven region was available. Based on this limited source, the typical farm obtained higher gross margins in all three crops.