

Multifunctionality: Food & Energy & Cultivated



We may or may not be aware of it, but for each and every one of us there are many ties between our life and agriculture. Farmers not only produce basic commodities for a broad range of foods on their farms, they also provide other important things like electricity or heat for local heating. They also produce various renewable feedstocks such as rapeseed oil, wood and starch. Apart from this, the cultivated landscapes which many of us use for recreation and sports have always been shaped and fashioned by agriculture.

Food

Bavarian agriculture produces a variety of products: cereals, milk, potatoes, meat, eggs, fish, local fruit and vegetables, hops, honey, wine and oil plants such as rapeseed, pumpkin and flax. Bavaria is self-sufficient with these foods. Nonetheless, many fruit and vegetable varieties are imported from Italy, Spain, and the Netherlands, or from countries outside Europe, because many people do not want to do without a wide choice of products from across the world. As an industrialised nation, Germany depends on exports, especially in the automotive and machinery sectors – this makes international trade necessary.

Energy

In the context of the energy transition, many farmers have established a secondary source of income by generating energy through biogas plants. In these facilities, certain components of a given substrate such as slurry, maize or other energy crops are broken down by bacteria to a combustible mixture of gases, called biogas. It is then used to fuel the generator of a cogeneration plant, producing electricity which is then fed into the public power grid. The residual heat generated during this process can be used to heat residential buildings or greenhouses for fruit and vegetables. The substrate residues remaining in the biogas plant is spread across the fields. This provides the soils with organic matter, thus completing the nutrient cycle. Rooftop solar energy from agricultural buildings also increase the share of renewable energy.

Cultivated landscape

The diverse Bavarian countryside, as we know and appreciate it today, has to a large extent been shaped by agricultural use. Were the regular cultivation of the meadows and fields to stop, the areas would be covered in bushes and eventually become overgrown with shrubs and lignified plants. The field paths people like to use for walks or sports would not exist without agriculture. The official term for them is farm road, "Wirtschaftsweg" in German, and their maintenance is usually ensured by the farmers themselves, not the local authorities.