



Poland's climate features moderate temperatures and adequate rainfall that enable cultivation of most temperate-zone crops, including all the major grains, several industrial crops, and several varieties of fruit (see Agriculture , this ch.; Climate , ch. 2). Crops are distributed according to the substantial regional variations in soil and length of growing season (see Topography , ch. 2). The sandy soils of the central plains are most suitable for rye, the richer soil in the south favors wheat and barley, and the poorer soil of the north is used for oats. All parts of Poland favor potato cultivation; sugar beets, the most important industrial crop, grow mainly in the west and southeast.

Agriculture

Of Poland's 18,727,000 hectares of agricultural land (about 60 percent of the country's total area), 14,413,000 hectares were used for crop cultivation, 265,000 for orchards, and about 4,048,500 for meadows and pastures in 1989. In most areas, soil and climatic conditions favored a mixed type of farming. In 1990 the most important crops were grains, of which the highest yields came from wheat, rye, barley, and oats. Other major crops were potatoes, sugar beets, fodder crops, flax, hops, tobacco, and fruits (see table 18, Appendix). Cultivation of corn expanded during the 1980s but remained limited. The northern and east-central regions of the country mainly offered poorer sandy soils suitable for rye and potatoes. The richer soils of the central and southern parts of the country, excluding higher elevations, made those regions the centers of wheat, sugar beet, hops, and tobacco production. The more accessible land at higher elevations was used to cultivate oats or was left as meadow and pastureland. In 1989 almost half of Poland's arable land was used for the cultivation of the four major grains, another 13 percent grew potatoes. All regions of Poland raised dairy cows, beef cattle, pigs, and poultry, and cultivated fruit, usually as an integral part of mixed farming.

In 1989 Poland was the second largest producer of rye and potatoes in the world. The latter were used as vegetables, fodder for pigs, and production of industrial starch and alcohol. The country occupied sixth place in the world in sugar beet, milk, and pig production. The quantity and quality of agricultural land ensured self-sufficiency and considerable quantities of various agricultural products and processed foodstuffs available for export. In 1990 Poland exported 26 percent of the bacon it produced, as well as 63 percent of the ham, 16 percent of the tinned meat, 10 percent of the poultry, 17 percent of the sugar, and 67 percent of the frozen fruits and vegetables.

Data as of October 1992

Private and State Farms

In 1987 about 2.7 million private farms were in operation. About 57 percent of them were smaller than five hectares. Of the remaining farms, 25 percent were between five and ten hectares and 11 percent were between ten and fifteen hectares. Only 7 percent of private farms were larger than fifteen hectares. Whereas the majority of the private farms were below optimum size, the majority of state farms were excessively large. Only 12 percent of the latter farms were below 200 hectares, and 60 percent were larger than 1,000 hectares.

In 1989 the private sector cultivated 76.2 percent of arable land and provided 79 percent of gross agricultural production. State farms, the main institutional form in state ownership, cultivated 18.8 percent of the total arable land and produced 17.0 percent of gross output. Cooperative farms, the dominant form of state agricultural organization in other East European economies, were not important in Poland. In 1989 they cultivated only 3.8 percent of arable land and contributed 3.9 percent of gross production.

In the 1980s, grain yields and meat output per hectare were higher in the socialist sector than in the private sector. An important factor in this difference was the more intensive use of fertilizers in state farms. On the other hand, the milk yield per cow was higher in the private sector. From the standpoint of overall performance, the private sector was less material and capital-intensive, and gross production per hectare and the value of product per unit of cost were higher in that sector. Besides being more efficient, private farms were also more flexible in adjusting production to obtain a higher product value.

Postcommunist Restructuring

Because of the predominance of private farms in communist Poland, privatization of agriculture was not a major necessity during the reform period, as it was in the other postcommunist countries. Excessively large state farms were to be split into more efficient units and sold; some state farms would be converted into modern agrobusinesses operating as limited stock companies; and a certain number were to be retained as state experimental farms. In all cases, however, rapid modernization and improvement in agrotechnology were urgent requirements.

The streamlining of agriculture faced serious obstacles in the early 1990s, notably because of the existing agrarian structure. Private farm size had to increase to provide farmers a satisfactory level of income and investment. Drastic reduction in the agricultural labor force also was needed. Because unemployment outside agriculture rose in 1991 and 1992, however, only gradual reductions were possible. A satisfactory social safety net and retraining programs for displaced agricultural workers were prerequisites for further reductions in labor. Experts estimated that unemployment on former state farms would reach 70 to 80 percent, meaning about 400,000 lost jobs, once the farms were privatized and streamlined.

Considerable investment is needed to provide adequate agricultural infrastructure, including road improvement, telecommunications, water supply, housing, and amenities. Especially important is establishment of a well-developed, competitive network of suppliers of materials and equipment necessary for modern agricultural production. Equally necessary are commercial firms to purchase agricultural products and provide transportation and storage facilities. In particular, expansion and modernization of the food-processing industry are necessary to strengthen and stabilize demand for agricultural products. The first postcommunist governments prepared agricultural modernization programs, and some financial help was obtained from the World Bank and Western governments for this purpose. Modernization was expected to require several decades, however.

By 1992 nearly all the 3,000 remaining state farms had substantial unpaid bank loans and other liabilities. For this reason, and because the government had not devised usable privatization plans at that point, the Farm Ownership Agency of the State Treasury was authorized to take over all the state farms in 1992. The agency was authorized to lease state

farm lands to either Polish or foreign renters, as a temporary measure to ensure continued productivity.

Data as of October 1992