



MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT



Agriculture and food economy in Poland - figures

WARSAW 2004

INFORMATION ABOUT POLAND

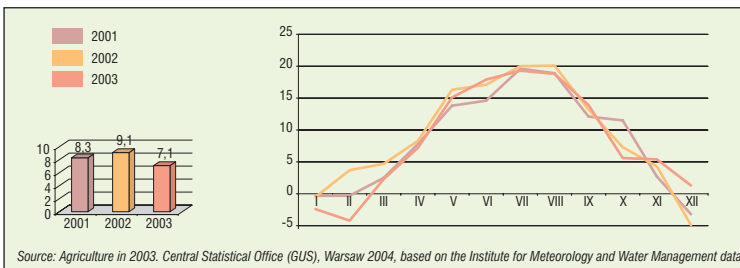
Since 1 May 2004 Poland has been one of the 25 members of the European Union (EU). The total area of Poland is 312 700 km² (9th largest state in Europe and 69th in the world) and the population is 38.2 million (8th place in Europe and 30th in the world).

Poland's inhabitants account for 8.4% of the total population of the enlarged European Union.

Located in Central Europe, Poland borders 7 states: the Russian Federation, the Republic of Lithuania, the Republic of Belarus and Ukraine, the Slovakian Republic, the Czech Republic and Germany. As from 1 May 2004 the border with Russia, Belarus and Ukraine has become an external EU border.

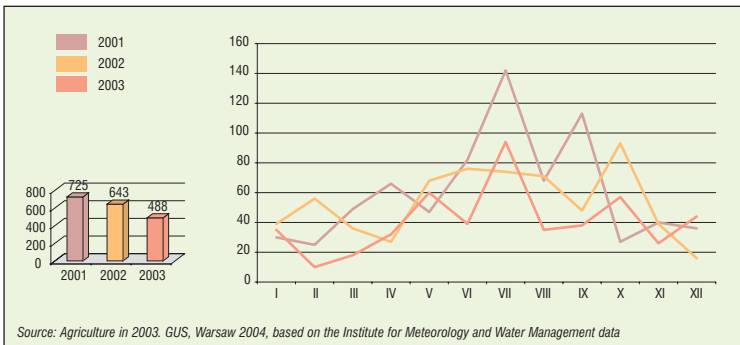
Due to its geographical location and topographic features, Poland's climate is characterised by frequent weather changes and fluctuations in the length of seasons.

Figure 1. Average monthly air temperature (°C)



The rainfall is the main source of water resources.

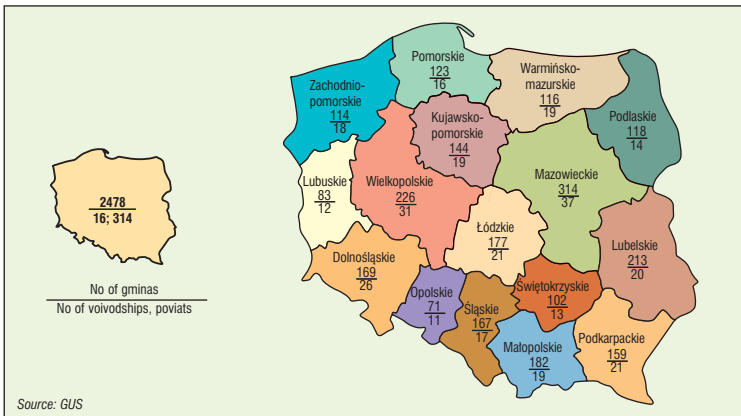
Figure 2. Average monthly precipitation in Poland (mm)



INFORMATION ABOUT POLAND

Poland's administrative division is composed of 16 voivodships (provinces), 314 poviats (counties), and 2478 gminas (communes). The auxiliary units in communes are solectwa (the lowest group of administrative division, usually comprising a single village), whose number is 40200.

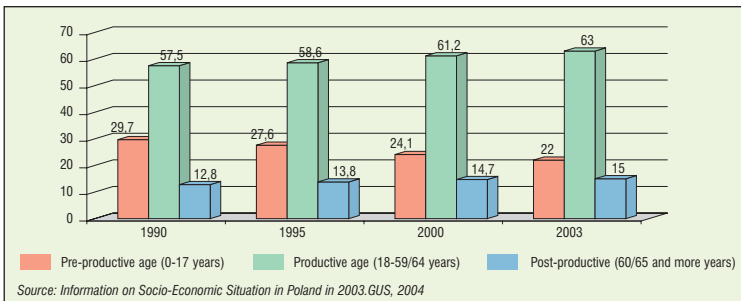
Figure 3. Units of territorial division in Poland in 2003



Out of the total population of 38.2 million, 14.6 million or 38.2% inhabit rural areas. Women account for 51% of the total Poland's population.

As compared with other European countries, Poland's population is demographically young, however, the age median has been increasing every year, whereas the number of children aged below 15 has been decreasing: from 25% in 1990 to 17% in 2003.

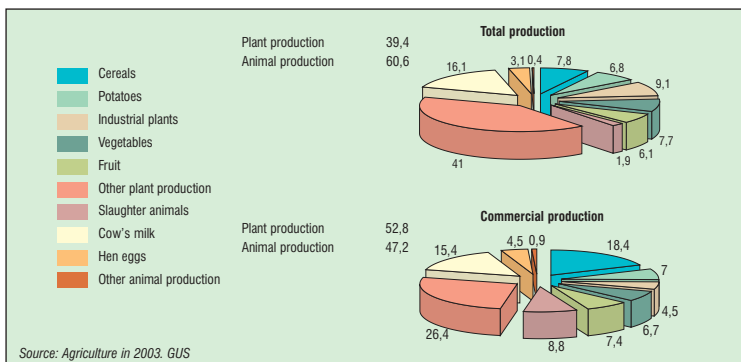
Figure 4. Population in 1990-2003 (%)



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Poland is a country with average agricultural land resources. In 2003, Utilised Agricultural Area (UAA) was 16.2 million ha, i.e. it accounted for 51.7% of the total Poland's area. The area used for feeding purposes as expressed in UAA per capita is high compared to the EU average and is equal to 0.42 ha. Terrain formation, climatic and soil conditions determine the types of agricultural production.

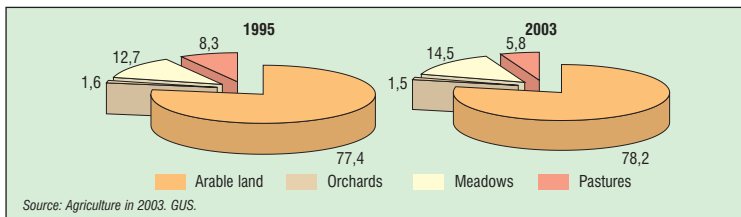
Figure 5. Structure of total and commercial agricultural production in 2003



Poland is characterised by great biological diversity and a huge variety of natural habitats and landscapes.

A significant part of farmers, in particular those owning small area farms, are involved in agricultural production applying traditional methods, mainly or exclusively to ensure food supplies for their families.

Figure 6. Structure of utilised agricultural area (UAA) in 1995 and 2003 (%)

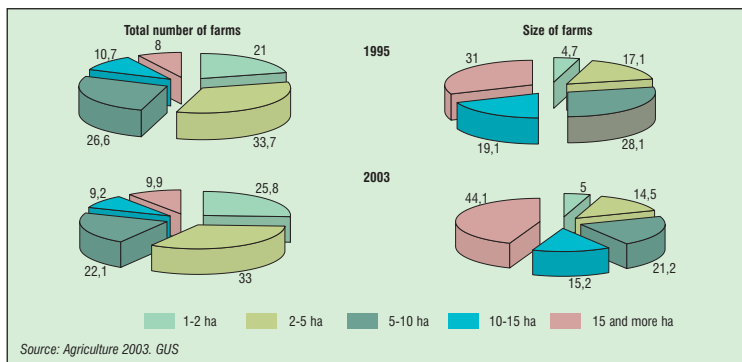


A characteristic feature of Polish agriculture is large differentiation of farm size from one hectare to several thousand hectares. The latter can be found in the private sector

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constituting 94.8% of the total UAA and the public sector managing 5.2% of farmland owned mainly by State Treasury farms set up on former state-owned farms. The problem of agricultural holding fragmentation occurs solely in the sector of private (family) farms.

Figure 7. Structure of private farms by UAA size in 1995 and 2003



Enlargement of the existing farms is a permanent process supported by preferential credits. Despite it, due to low profitability of agricultural production and lack of capital, the pace of agrarian structure change is too slow, and land prices remain at a relatively low level.

Table 1. Average prices of arable land and meadows in private trading in 1995 and 2003 (price for 1 ha)

Specification		PLN	Dt	
			Rye	Live pigs for slaughter
Arable land on average	1995	2421	90,2	9,3
	2003	5753	142,2	18,2
- good quality (wheat-beet)	1995	6712	161,7	18,6
	2003	7960	196,7	25,2
- average quality (rye-potato)	1995	4920	118,5	13,7
	2003	5801	143,4	18,4
- poor quality (sandy)	1995	2725	65,6	7,6
	2003	3497	86,4	11,1
Meadows of good quality	1995	4883	117,6	13,6
	2003	5168	127,7	16,4
- poor quality	1995	2753	66,3	7,6
	2003	3049	75,4	9,6

Source: Agriculture in 2003. GUS, Warszawa 2004.

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In 2003, as expressed in Euro, the average price of arable land was 130.8 Euro/ha (181 Euro/ha for good quality arable land), and that of good quality meadows – 117.5 Euro/ha.

PLANT PRODUCTION

Land productivity in Poland is much lower than in the EU-15, which is determined by soil quality, the climate and a lower usage of agrochemicals for agricultural production.

Table 2. Area, production and yields of major crops in 1996-2003

A area ('000 ha), B yields per ha (dt), C production ('000 tonnes)

Type of crops		1996-2000	2000	2003	
					2002=100
Total cereals					
area	A	8796,0	8814,0	8163,3	98,4
yields	B	28,6	25,3	28,7	88,6
production	C	25189,4	22340,6	23390,8	87,0
Total wheat					
area	A	2576,8	2635,0	2308,0	95,6
yields	B	34,0	25,3	34,0	88,3
production	C	8772,0	8502,9	7858,2	84,5
Rye					
area	A	2275,4	2130,2	1479,3	94,8
yields	B	22,7	18,8	21,4	87,0
production	C	5160,0	4003,0	3172,2	82,8
Potato					
area	A	1292	1251	765,8	95,3
yields	B	183,0	194,0	179	92,7
production	C	23620,0	24232,3	13731,5	88,5
Total rapeseed and agrimony					
area	A	409,6	436,8	426,3	97,1
yields	B	20,7	21,9	18,6	85,7
production	C	846,7	958,1	793,0	83,2
Sugar beets					
area	A	395,4	333,1	286,3	94,5
yields	B	377,0	394,0	410	92,6
production	C	14920,1	13134,4	11739,5	87,4

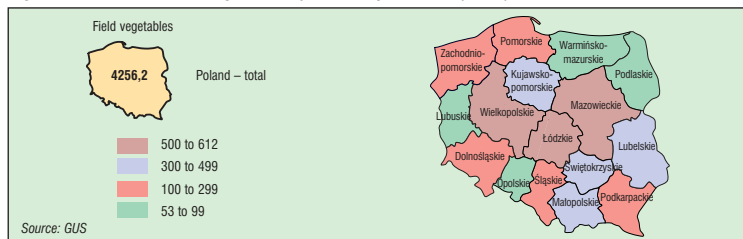
Source: GUS

In 2003 yields of major crops were lower than in 2002. Yields in Poland are approximately twice as low as the average yields in the EU, however compared to certain countries such as Greece and Spain, yields in Poland are higher.

A wide variety of fruit and vegetables is produced in Poland in different regions depending on soil and climatic conditions and proximity to large agglomerations.

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Figure 8. Production of field vegetables, by voivodships, in 2003 ('000 t)



In 2003 the total harvest of field vegetables and those under cover amounted to 5 091 000 t and was by 389 000 (8.3%) larger than that in 2002. Crops under covers occupied 54 408 000 m², including plastic-covered greenhouses – nearly 60%, glasshouses - 39% and hotbeds - 1%.

Table 3. Area, yields and production of field vegetables in 1996-2003

A area ('000 ha), B yields per ha (dt), C production ('000 tonnes)

Specification		1996-2000 ¹⁾	2002	2003	
		Absolute figures			2002=100
Total	A	243,6	171,3	198,4	115,8
	B	389	440	4419,5	112,0
	C	5345,7	3947,2		
Cabbage	A	48,6	27,0	31,8	117,7
	B	380	440	389	88,4
	C	1846,0	1188,5	1236,7	104,1
Cauliflower	A	13,0	9,8	10,4	106,0
	B	191	180	182	101,1
	C	248,0	176,4	188,8	107,1
Onion	A	33,8	27,7	32,5	117,2
	B	203	211	209	99,1
	C	684,4	584,9	678,3	116,0
Edible carrot	A	31,8	27,8	30,3	109,0
	B	279	249	276	110,8
	C	887,7	692,1	834,6	120,6
Red beets	A	21,0	10,2	13,5	132,2
	B	240	304	247	81,3
	C	503,1	311,2	333,5	107,1
Cucumber	A	27,6	18,2	20,2	111,3
	B	129	143	143	100,0
	C	357,3	259,7	289,7	111,6
Tomato	A	22,7	8,7	11,4	130,5
	B	128	253	205	81,0
	C	290,0	221,4	234,1	105,7
Other ²⁾	A	45,1	41,9	48,3	115,4
	B	117	123	129	104,9
	C	529,2	513,0	623,9	121,6

¹⁾ annual average, ²⁾ parsley, leek, celeriac, radish, lettuce, rhubarb, asparagus, dill and other

Source: Plant production in 2003.GUS

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Table 4. Area, yields and production of tree fruits and berries in 2000-2003

A area ('000 ha), B yields per ha (dt), C production ('000 tonnes)

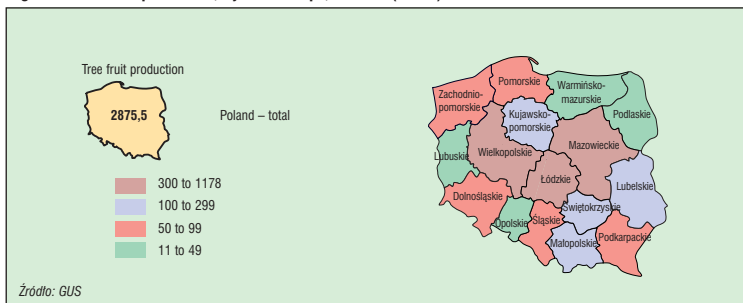
Fruit type		2000	2002	2003
Total tree fruit		1837,1	2603,5	2875,5
Apple trees				
area	A	165,1	168,5	159,3
yields	B	88,0	129,0	152
production	C	1450,4	2167,5	2427,8
Pear trees				
area	A	18,3	14,3	14,5
yields	B	45,0	64,0	53
production	C	81,6	92,1	77,2
Plum trees				
area	A	31,7	26,9	25,0
yields	B	34,0	38	44
production	C	106,9	102,9	109,6
Sour cherry trees				
area	A	39,3	39,0	37,8
yields	B	36,0	44,0	51
production	C	139,6	173,1	191,1
Cherry trees				
area	A	21,1	11,9	11,0
yields	B	32,0	34,0	40
production	C	38,6	40,8	44,1
Other: peach, apricot, walnut trees				
area	A	10,3	9,5	9,1
yields	B	19,0	28,0	28
production	C	20,0	27,0	25,8
Total berries		409,4	414,5	433,3
Strawberries				
area	A	62,0	38,0	43,9
yields	B	28,0	40,0	30
production	C	171,3	153,1	131,3
Raspberries				
area	A	12,6	13,4	13,3
yields	B	32,0	33,0	32
production	C	39,7	44,9	42,9
Currants				
area	A	33,5	42,3	38,9
yields	B	44,0	37,0	49
production	C	146,8	157,5	192,5
Gooseberry				
area	A	5,9	3,6	3,6
yields	B	49,0	60,0	56
production	C	28,6	21,7	20,3
Other: aronia, bilberry and other				
area	A	3,3	8,4	7,6
yields	B	68,0	45,0	61
production	C	23,0	37,3	46,3

Source: GUS

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As regards the production of vegetables, cabbage, carrot and onion have the largest share, the production of tree fruit – apples, and that of berries – currants, strawberries and raspberries.

Figure 9. Tree fruit production, by voivodships, in 2003 ('000 t)



In 2003 the production of tree fruit was 28 075 000 t and that of berries – 433 000 t.

ANIMAL PRODUCTION

Farm animals are mainly raised on private - family farms.

Table 5. Livestock numbers – situation in June (head of animals)

Specification	1990	1995	2000*	2003*	2003* 1990=100
Cattle	10049	7306	6083	5489	54,6
including cows	4919	3579	3098	2897	58,9
Pigs	19464	20418	17122	18605	95,5
including sows	1837	1875	1577	1782	97,0
Sheep	4159	713	362	338	8,1
including ewes	2564	450	223	185	7,2
Horses	941	636	550	333	35,4

* pigs (situation at end-July)

Source: GUS

According to the 2002 General Agricultural Census data, 935 200 agricultural holdings were involved in cattle rearing and breeding, i.e. 31.9% of the holdings of an area from 0.10 ha, 875 400 in cow rearing (29.8%) and 760 600 agricultural holdings were engaged in pig raising and breeding (25.9%). Despite an increase in the concentration of farm animal production, it remains low and is conducive to environmental protection. As for slaughter animals, pigs dominate and the importance of poultry meat production is growing.

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Table 6. Production of major animal products in 1990 – 2003

Type of production	Unit	1990	2000	2003
Total slaughter animals:				
by live weight, including:	'000 t	4493	4112	4776
- pigs	'000 t	2341	2501	2833
- cattle	'000 t	1428	635	591
- calves	'000 t	105	83	76
- poultry	'000 t	474	834	1228
- horses	'000 t	37	45	30
- sheep	'000 t	96	7	6
Milk	million l	15371	11543	11546
Eggs	million units	7597	7621	9168
Wool	T	14783	132	1218

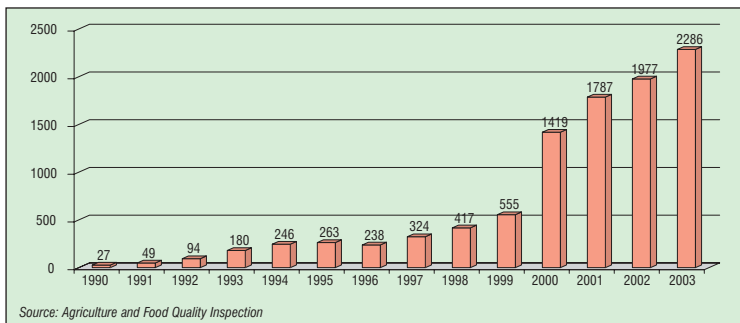
Source: GUS

Per unit productivity of farm animals is increasing, though it remains at a much lower level than in the EU-15.

ORGANIC FARMING

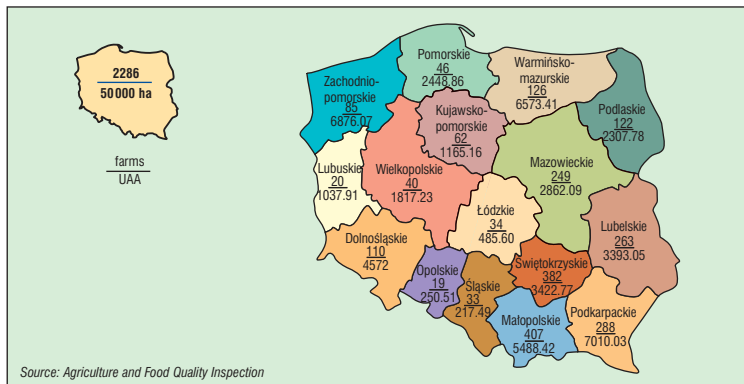
Food production by organic methods in the clean and safe environment, without mineral fertilisers and synthetic plant protection substances, free of antibiotics, growth hormones or genetically modified organisms is systematically increasing. However, the potential of such production related to the clean environment is not fully exploited, primarily due to a relatively low support for organic farms, while production costs are high.

Figure 11. Number of organic farms inspected in Poland in 1990-2003 (with a certificate and during conversion)



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Figure 12. Organic farms in Poland in 2003.

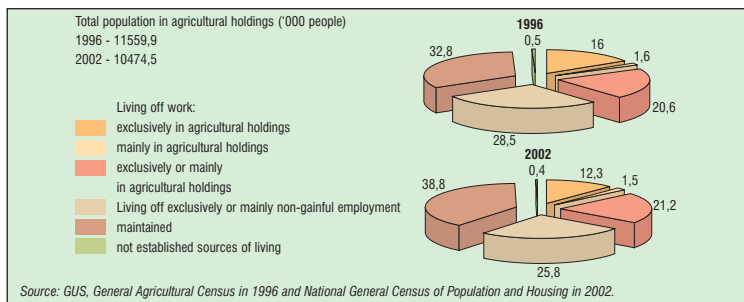


POPULATION AND HUMAN RESOURCES IN AGRICULTURE

According to the General Population and Housing Census and the Agricultural Census, conducted in 2002, 10 474 500 people, i.e. 27.4% of Poland's population, lived in households connected with a farm (area of more than 10 ares) user. Eighty per cent or 8 504 900 people were inhabitants of rural areas. This implies that 58.2% of the total rural population was connected with farming through a common household.

Similarly as in other countries, farm owners in Poland have various sources of income.

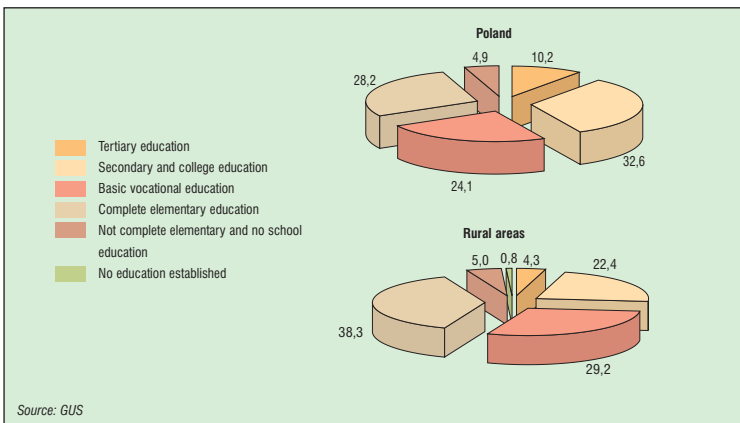
Figure 13. Population structure in agricultural holdings, by sources of income, in 1996 and 2002



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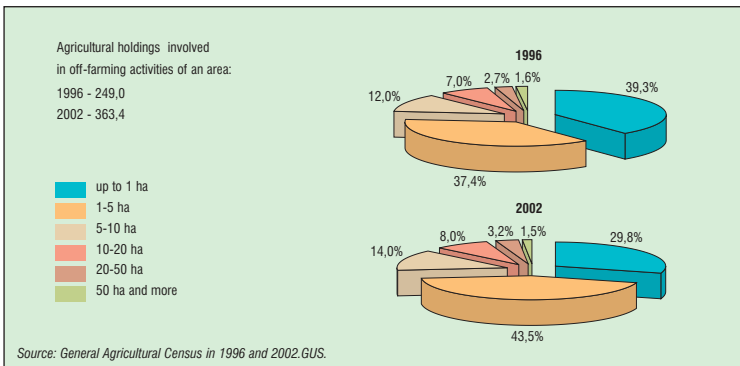
The education level in rural areas is lower than in towns.

Figure 14. Structure of population aged 15 and above, by education level, in 2002



Due to the lack of capital and a relatively low education level, few farms undertake off-farming activities.

Figure 15. Agricultural holdings involved in off-farming activities, by area, in 1996 and 2002



FOOD INDUSTRY

FOOD INDUSTRY

Food industry, comprising the production of foodstuffs and beverages as well as tobacco products, accounts for 1/5 of the total sales of the Polish industry.

Table 7. Sold output¹⁾, average employment and remuneration in 2003

Sections, subsections and groups	Sold output		Average employment		Average monthly gross remuneration	
	PLN million	2002=100	('000)	2002=100	PLN	2002=100
Industrial processing	362253,0	113,5	1534,8	99,9	2197,83	103,0
Production of foodstuffs and beverages	75340,5	108,0	286,9	101,1	2086,08	101,7
Production, processing and preservation of meat and meat products	18268,5	114,2	82,4	111,3	1538,57	100,9
Processing and preservation of fish	1845,5	137,9	8,9	105,5	1556,79	103,3
Fruit and vegetable processing	7647,9	117,4	30,6	102,8	2061,31	103,6
Production of oils and fats of plant and animal origin	2049,4	99,7	2,8	84,2	3317,37	105,4
Production of dairy products	12210,4	103,9	44,3	96,5	1985,07	103,9
Production of grain milling products, starch and starch products	2462,9	107,8	6,8	100,4	2269,98	101,3
Production of animal feedingstuffs	5202,0	105,4	6,5	94,2	3888,61	103,1
Production of other foodstuffs	14511,7	100,9	75,8	94,4	2169,02	103,1
Production of beverages	11142,2	105,3	29,0	101,4	3203,80	102,5
Tobacco products output	3313,1	102,5	6,2	84,2	4426,37	107,7

¹⁾ at current prices; dynamics at constant prices

Source: GUS

In 2003 the industry performance deteriorated, though the results remained positive. The public sector, where the cost level index exceeded 100%, incurred losses.

Table 8. Costs and profitability of food industry in enterprises employing 50 persons and more in 2002-2003

Specification	Cost level index		Profitability*			
	2002	2003	Gross		net	
			2002	2003	2002	2003
Total food industry, including:	97,3	97,7	2,8	2,3	1,8	1,4
- public sector	100,2	103,8	0	-3,1	-0,8	-3,9
- private sector	97,0	97,3	3,1	2,7	2,1	1,8
Production of foodstuffs and beverages, including:	97,0	97,6	3,1	2,5	2,0	1,5
- public sector	100,3	103,9	0	-3,2	-0,8	-4,0
- private sector	96,6	97,0	3,4	3,0	2,3	1,9
Manufacture of tobacco products, including:	99,2	99,1	0,8	0,9	0,5	0,7
- public sector	99,4	99,6	0,6	0,4	0,3	0,3
- private sector	99,2	99,0	0,8	0,9	0,5	0,7

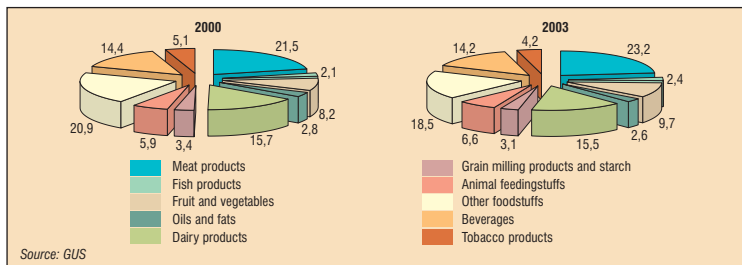
* relation of the gross or net financial result to revenues from all operations, Source: GUS

FOOD INDUSTRY

Out of 1 526 food industry establishments employing 50 and more persons, 74.2% generated net profit (79.9% in 2002).

As regards food industry sales, meat products, dairy products and beverages have the biggest share.

Figure 16. Pattern of product group sales in food industry in 2000 and 2003



Consumption of foodstuffs

The consumption of particular products fluctuates depending on their prices and population incomes. High supply and relatively low prices of products of animal origin had impact on the rise in the consumption thereof.

Table 9. Annual consumption per capita of staple foodstuffs in 1995 - 2003 (kg/l/units)

Specification	1995	2000	2003*
Processed cereals	120	119	120
Potatoes	138	132	130
Vegetables	120	120	110
Fruit	40,9	51,1	54,5
Meat and offal,	63,4	65,4	72,4
including: total meat	59,4	61,4	68,0
- pork	39,1	38,0	.
- beef	8,7	6,8	.
- poultry meat	10,2	14,1	.
Edible oils by marketable	25,3	28,4	29,2
weight including: animal fats	7,2	6,6	6,9
vegetable oils	14,4	17,6	17,6
butter	3,7	4,2	4,7
Cow's milk (l)	195	191	181
Hen eggs (units)	154	186	214
Sugar	41,9	41,2	40,3

Source: GUS

FISHERIES

FISHERIES

Fisheries in Poland cover the Baltic Sea fisheries, deep sea fishing and inland fisheries. The internal sea waters occupy 1 991 km², and the territorial sea – 8 682 km².

The Baltic Sea salinity is very low; the further from the Danish Straits, the lower its average salinity. Most of Polish rivers are situated in the Baltic Sea basin.

Poland is a country with a relatively large number of lakes; there are more than 7 000 reservoirs of more than 1 ha and their total area is over 280 000 ha.

Table 10. Fish balance in Poland, by live weight ('000 t), in 1995-2003

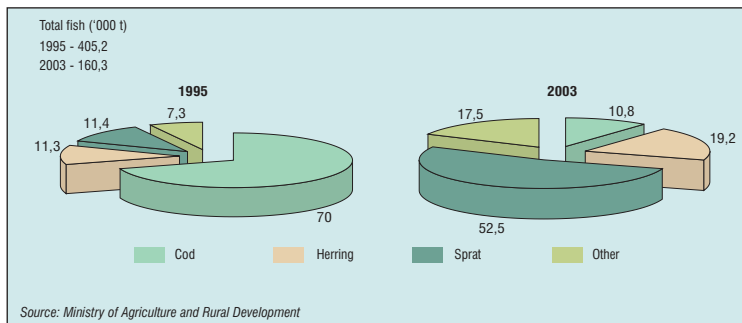
Specification	1995	2000	2003	
				1995=100
Sea catches	405,2	220,5	160,3	39,6
including: Baltic Sea	129,6	141,1	142,7	110,1
deep sea	275,6	59,0	17,6	6,4
buying in of fish in deep sea fishing grounds	-	20,4	-	-
Inland fisheries and aquaculture catches	45,0	55,0	54,0	120,0
Imports	316	456,2	424	134,4
Exports	327,6	249,8	238,0	72,6
including export				
- from vessels	196,8	86,7	66,3	336,9
- from land	130,8	163,1	171,7	131,3
Supply of fish for human consumption on the domestic market	438,7	481,9	400,8	91,4

Source: Institute of Agriculture and Food Economics (IERIGŻ) based on the Marine Fishery Institute (MIR) and Inland Fisheries Institute (IRS) data.

In 2003 marine fish catches in the Baltic accounted for 89% of the total sea catches. Currently, sprat has the largest share in such catches.

As for inland fisheries production, carp and trout are dominant species; at present they account for approximately 60% of the total inland fisheries production, whereas angling – for 26.5%.

Figure 17. Pattern of marine fish catches by major fish species ('000 t)

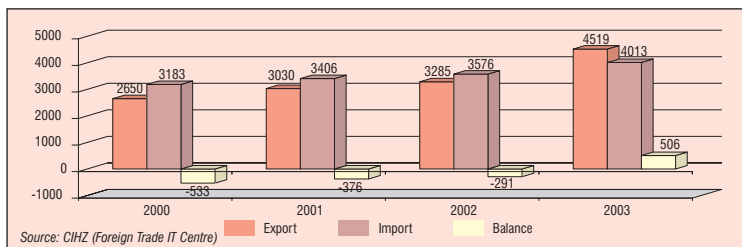


FOREIGN TRADE IN AGRI-FOOD PRODUCTS

FOREIGN TRADE IN AGRI-FOOD PRODUCTS

2003 saw for the first time in 10 years a positive balance of foreign trade in agri-food products.

Figure 18. Results of foreign trade in agri-food products in 2000 – 2003 (million USD)



Compared to the last 3 years, in 2003 the share of agri-food products in the total Poland's foreign trade increased, whereas in imports it decreased.

Table 12. Share of agri-food products in total foreign trade (%)

Specification	2000	2001	2002	2003
% share of agri-food products in:				
- total exports	8,4	8,4	8,0	8,4
- total imports	6,5	6,8	6,5	5,9

Source: CIHZ

Poland's major trading partner with respect to trade in agri-food products is the European Union.

Table 13. Foreign trade in agri-food products in 2000-2003 by groups of countries

Specification	Export		Import		Balance	
	2000	2003	2000	2003	2000	2003
Total	2650	4519	3183	4013	-533	506
EU	1287	2309	1622	2090	-335	218
Former Soviet Union states	602	890	106	114	496	776
CEFTA	316	544	352	400	-37	144
EFTA	30	58	140	170	-110	-112
USA	107	170	74	92	34	79
Other	308	548	888	1148	-581	-600

Source: CIHZ