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# Polish Rapeseed Production in 1994

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#### **Abstract**

Cultivation of rapeseed in Poland occupied about 3 per cent of cultivated areas in 1994, -the acreage of harvested oilseed rape amounting to about 335,000 ha. The 80 per cent of cultivated area was planted with Polish varieties: Leo, Polo, Mar, Bolko, Bor and Marita. The remaining 20 per cent was sown with German varieties: Libravo and Lirajet, or the French variety Idol. Total seed harvest amounted to 678,200 tons. The yield was 20,3 dt/ha and rapeseed production was 84,000 tons better than in 1993.

Oil industry in Poland is paying world prices for rapeseed and trying to buy as big amounts as possible because of the unprofitability of imports. 1994 prices were 55 % higher than in 1993.

It is estimated that above 500 thousands ha were sown with winter oilseed rape for the next year harvest.

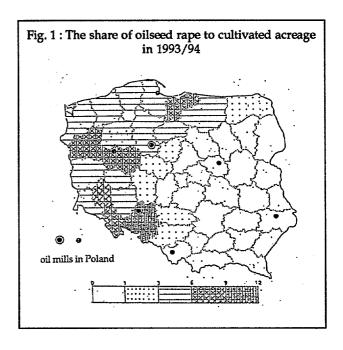
**Key words:** winter oilseed rape, Polish varieties, seed yield, rapeseed economy, rapeseed production.

#### Oilseed Rape Cultivation

Winter oilseed rape was practically the only oil crop cultivated in Poland, and after changing to double low varieties, it became the most important oil and protein plant.

In 1994, rapeseed occupied about 3 per cent of cultivated areas in Poland. This share in acreage of planted areas is differentiated in various parts of Poland.

The higher concentration of oilseed rape cultivation is in northern, western and southwestern parts of Poland, where the great farms (state farms, cooperatives and different companies) have the highest contribution in production. Also oil mills are located in that area (Fig.1).



In Poland, over the last four years, farmers' interest for growing oilseed has been reduced. Also a decrease in seed yield /ha could be observed (Fig.2).

In 1994, the acreage of harvested winter and spring oilseed rape amounted to about 335,000 ha, corresponding to the following reductions:

- 4% as compared to 1993
- 20% as compared to 1992
- 28% as compared to 1991 and
- 33% as compared to 1990.

If we compare with the record year of 1989, the acreage was reduced by 41%.

This situation can be explained as follows:

- a reduction in the use of fertilizers and an insufficient plant protection due to high price increases of fertilizers and plant protection services,

- more profitable cultivation of wheat as compared to oilseed rape,
- difficult financial situation of farms, especially former state farms and cooperatives, where about 70% of oilseed rape was produced before, and
- unfavourable drought weather conditions over the last three years.

### Varieties cultivated in Poland

Since 1990, only 00-low rapeseed varieties have been cultivated in Poland. 80 % of cultivated areas were planted with Polish varieties: Leo, Polo, Mar, Bolko, Bor and Marita 1994. The remaining 20 % was planted with German varieties: Libravo and Lirajet, or the French variety Idol.

#### **Rapeseed Production**

Since many years now, Poland has had a leading position for rapeseed production in Europe. The highest production level was 1.585.000 tons in 1989. This seed production covered all needs of the Polish oil industry. The surplus was exported.

But last year, 1994, was rather unsuccessful for Polish rapeseed production. We obtained some increase in seed yield, but due to the small acreage, the production amounted only to 678.200 tons. The yield was 3,2 dt/ha better and the (whole) rapeseed production was 84.000 tons better than in 1993.

It is expected that the reduction in oilseed rape cultivation /production is stopped now. The status of the domestic oilseed market has improved a little in 1994, but there is still a shortage of feedstuff for oil mills.

# Economic Conditions of oilseed rape cultivation

The average price for rapeseed in 1994 amounted to more than 6 millions zloty per ton with a standard moisture content of 7 per cent, and foreign matter contents corresponded to 4 and 1 per cent (useful and unuseful). This price was 55 per cent higher than in 1993.

With the addition of transport and other costs (because return of these if guaranteed for farmers), the total cost of 1 ton/rapeseed for the industry amounted to nearly 7 millions zloty (about 311 US\$). Rapeseed prices on the Hamburg market, at the end of June 1994 for delivery late in July or early in August, were estimated at 280 US\$ per ton. After adding transport costs (about 15 US\$/ton), customs taxes (15%) and board taxes (6%), the price of 1 ton of imported rapeseed amounted to about 8 millions/zloty. In 1994, vegetable fat manufac-

tures in Poland paid the world prices for rapeseed, trying to buy as big amounts as possible because of the unprofitability of imports.

The figure 4 shows the structure of costs, giving the most important outlays on 1 ha/winter oilseed rape cultivation in Poland in the crop year 1993/94. The costs are calculated for two different technologies of cultivation:

- standard recommended for small family farms,
- -intensive recommended for big farms (market orientated farms).

Both technologies differ in levels of seed yields and brutto income.

## Cultivation technology

	seed yield t/ha	brutto income	Direct cost
	,	thou-sands Zloty	
standard	2,2	13.200	9.000
intensive	3,0	18.000	9.500

The brutto income (total cost minus direct cost) received with the use of the standard cultivation method amounted to 4,2 mln.zl (187 US\$), but with the intensive cultivation method, nearly 8,5 mln.zl (378 US\$). To calculate the netto income, it is necessary to know the amount of indirect costs which are different for every farm.

# Perspectives of oilseed rape cultivation in Poland

The climate and soil conditions in Poland are suitable for cultivation of winter oilseed rape. It should be profitable to increase the production, and to hold it on the level of 1.200-1.300 thousands tons (about 500.000 ha). Marketorientated farms will be of great importance for the future of oilseed rape production in Poland. Over the last years, the share of oilseed rape in cultivated areas on such farms was at a very high level (11 %) as compared to small family farms, on which it has decreased from 1,3 in 1990 to 0,8 % in 1994.

The relatively high profitability of oilseed rape in 1994 has increased farmers' interest for this crop. We can observe some positive changes in areas planted with oilseed rape now. It is estimated that 520 to 560 thousands/ha of winter oilseed rape were sown for the next year harvest. A production increase is expected for next year, which means:

- reconstitution of the base for domestic vegetable fat production,

- possibility to cover the Polish market demand for domestic margarines and other vegetable fats,
- production of higher amounts of rapeseed oil for industrial purposes,
- export possibility of surplace to compensate adverse balance in foreign trade (palm oil, sunflower oil, etc.)

A better cooperation between the oil industry and farms would be necessary to secure the future of oilseed rape cultivation. The use of more economical technologies by farmers would be also a very important factor to increase the profitability of production.

Fig. 2: The area of cultivation and yield of oilseed rape in Poland

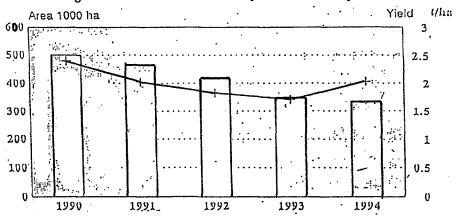


Fig. 3: The/production of oilseed rape in Poland

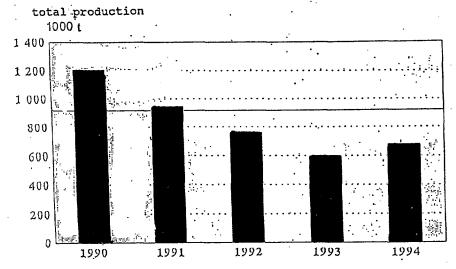


Fig. 4: The structure of costs in two technologies of oilseed rape cultivation

