

RECENT DEVELOPMENTS IN OILSEED RAPE PRODUCTION IN GERMANY

Dr. Gisbert KLEY, Ludger ALPMANN, Marion NÖLKENSMEIER

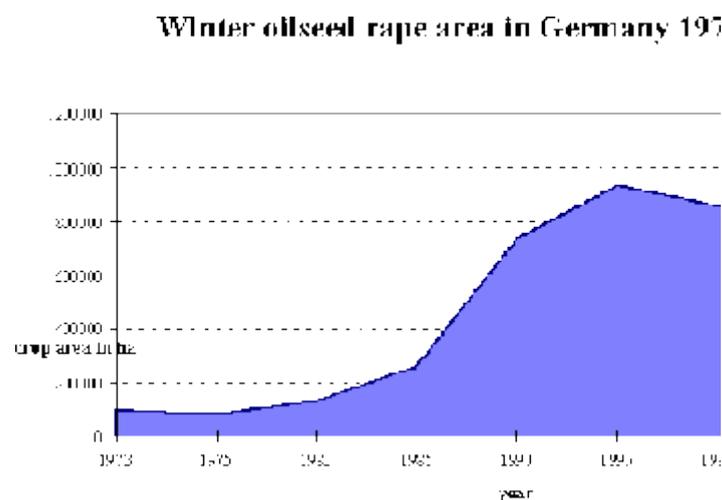
DSV - Deutsche Saatveredelung Lippstadt-Bremen GmbH,
Weissenburger Straße 5,
D-59557 Lippstadt

1. Winter oilseed rape cultivation

The winter oilseed rape area in Germany has been greatly influenced by the international market during the last years. Good prices for rapeseed oil and meal as well as low small grain cereal prices have led to a distinct increase in cultivation of rape. So in 1998 (harvest 1999) approximately 1,17 million ha of winter oilseed rape were sown in Germany (Fig. 1). Approx. 0,82 million ha are designated as food-rape and 0,35 million ha as non-food-rape.

For sowing 1999 (harvest 2000), the winter oilseed rape area is likely to decrease in Germany. Producers' greater insecurity, caused by the AGENDA 2000 and its cut of the subsidies combined with the reduction of set aside could lead to a reduction in winter oilseed rape production. But, in turn the low price level for cereals could ease to decline the oilseed rape area.

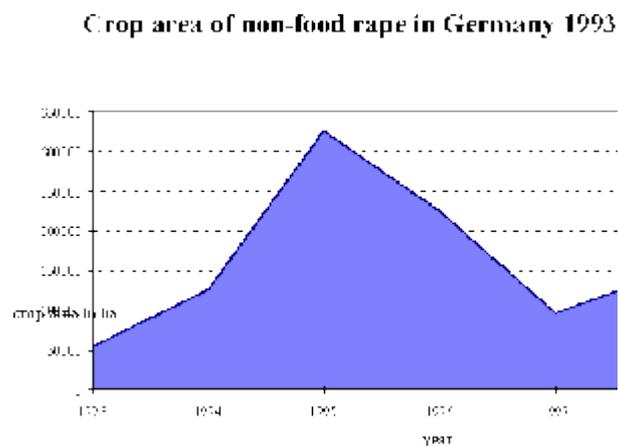
Fig. 1: Winter oilseed rape area in Germany 1973-1999



Cultivation of non-food-rape plays an important role in agriculture in Germany (Fig. 2). The farmers favour the production of rape compared to fallow because crop rotation and plant hygiene are very important aspects. Other reasons for cultivation of non-food-rape are good sales profits in 1997 and 1998. They could be achieved because non-food-rape was used to produce bio-fuels. The permanent progress in the use of bio-fuels (actually almost 800 gas stations) is a result of the

successful marketing strategy of UFOP (Union zur Förderung der Öl- und Proteinpflanzen = Union to promote oil and protein crops), which is a strong partner of German agriculture to promote oilseed rape. In addition to the market of bio-fuels, rape oil was also detected as a raw material for the chemical industry. At the moment almost 50 % of the oil is sold to this destination. UFOP used the non-food area as a means to better meet the area restrictions of the Blair-House-agreement to advise farmers in that way to escape from EU-penalties in case of excess.

Fig. 2: Crop area of non-food rape in Germany 1993-1999



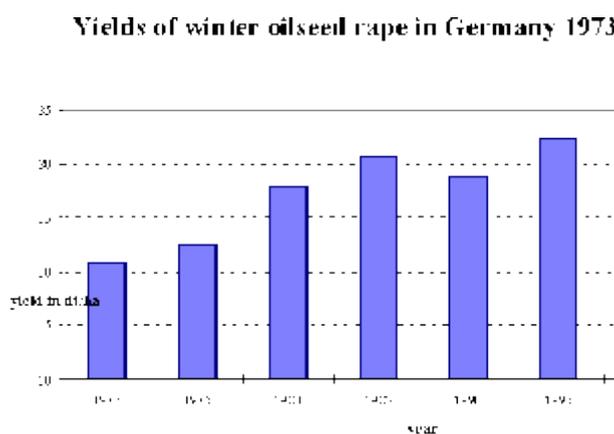
2. Spring oilseed rape cultivation

Spring oilseed rape has only minor importance in Germany. The area varies between 35 000 and 55 000 ha. Only in 1996 spring oilseed rape was grown on 80 000 ha because of a strong winter, which caused losses in the winter rape area. For sowing in 1999, cultivation of spring oilseed rape will increase due to bad weather conditions in 1998 during the sowing season.

3. Yields

The good prices of the last three years have led to a high intensity of growing. Because of high inputs the average yield of winter oilseed rape could be stabilised at 32,5 dt/ha. On better soils German farmers produced 50 dt/ha and more. The average yield of spring oilseed rape amounts to 22-23 dt/ha.

Fig. 3: Yields of winter oilseed rape in Germany 1973-1998



4. Varieties cultivated in Germany

Open pollinating varieties dominate in Germany (90%). Small and medium-sized farms use one variety only in contrast to the bigger farms, mainly those in the eastern part of Germany. They use two to four varieties to better plan and extend the harvest season. The four most important open pollinating varieties actually are EXPRESS, LIRAJET, MOHICAN and LISABETH. Altogether they account for 65% of the rape area.

During the last two years fully-restored hybrids entered the market. They have got a market share in 1998/1999 of 10 %. These so-called MSL (male sterility Lembke) -hybrids are high-yielding and reliable varieties compared to the composite-hybrids, which entered the market in 1994/1995. Composite hybrids are no longer grown because of their often occurring problems in pollination, especially under bad weather conditions, i.e. after hard winters and rain during the flowering period. MSL-hybrids will increase their market share in the next years.

Most of the spring rape varieties (more than 95 %) are still open pollinating varieties. This will not change over the next years.

5. General basic marketing for oilseed rape in Germany

Basic marketing for oilseed rape in Germany is especially done by UFOP. After the successful work in pre-marketing for non-food-rape to produce bio-fuels, UFOP's permanent efforts now led to first sales of labelled rape oil for human nutrition. Until now rapeseed oil was only sold to consumers as vegetable oil without referring to oilseed rape. Today, consumers like rape oil because of its mono- and poly-unsaturated fatty acids. According to well-known food-scientists rape oil belongs to one of the best oils worldwide. These nutritional advantages of rapeseed oil are widely exploited by UFOP to enlarge the consumption. They also try to position rapeseed oil on a higher consumer price level to improve farmers' benefits.

This is also true for the use of rapeseed meal. There was no difference observed using rapeseed or soya bean meal in trials with cows and pigs.

In addition to UFOP's marketing activities it also represents farmer's interests in politics.

6. Genetically modified varieties

German plant breeding companies are working on herbicide-tolerant winter oilseed rape varieties and varieties with a modified fatty acid profile. As a result of these activities the first herbicide tolerant Liberty-link variety has successfully passed dus- and vcu-trials and is ready for registration. But, unfortunately, due to a lack of final EU-approval for marketing according to part C of the EU-directive 90/220, it has not been launched yet. Further open pollination varieties and hybrids with herbicide tolerance will steadily follow. For a better industrial use of rape oil, breeders are also working on rape varieties with a high content of erucic acid, oleic acid or middle-chain fatty acids. First promising results are already achieved.

At present, 103 GMO field trials with genetic modified oilseed rape varieties are carried out in Germany. Different characteristics (herbicide-tolerance, modification of the fatty acid profile, disease resistences, hybrid systems) are being processed.

7. Political situation and consumers' acceptance of GMO-varieties

The decision of introducing genetically modified varieties in Europe will depend on the political situation and the consumers' acceptance in the different States of the European Community.

In Germany most of the farmers are convinced of the advantages of genetically modified varieties. They recognize their economical and ecological advantages, but consumers are often insecure. Campaigns to inform customers are now developed by various associations and agencies like CMA (Centrale Marketing-Gesellschaft der deutschen Agrarwirtschaft) to show the scientific background and advantages of modern techniques.

8. Perspectives

Since 1992 farm policy of the EU is under ongoing restructure. The recently negotiated AGENDA 2000, which will enter into force in 1999/2000, is aiming at adjusting the EU product prices to the world market level or at least tighten the distance between the EU-price level and the world market price level.

That means for oilseed rape to lower the actual subsidy to the subsidy amount of cereal crops. As it can be anticipated today, this measure will likely lead to the following consequences in Germany:

- The competitiveness of oilseed rape will generally increase in better soils.
- In poorer soils monetary competitiveness will diminish, but in turn oilseed rape is required as head of cereal rotations. So it is most likely that a minimum share of oilseed rape will continue to grow under these conditions .
- Good world market prices in future will automatically pass through to the grower prices, without being negatively adjusted by the market regulation like today, and so being supportive to the competitiveness of oilseed rape.

Nonetheless for plant breeding in oilseed rape this development constitutes a big challenge to improve basically the yield potential of oilseed rape.

After a long period of quality breeding, which has in fact weakened the progress in yield breeding, German plant breeders are now focussing their work on breeding for high yields and, thus making oilseed rape to cope easier with cereal crops in terms of competitiveness.

Above that it is expected that once the equivalence of oilseed rape and cereal subsidies as fixed per ha-amounts are in force, the Blair-House Compromise, which is a severe constraint to the EU-oilseed rape production, will be abolished.