

Hemp Support: The European Union Experience

(Draft)

May 2001

Valerie Vantreese

University of Kentucky
Department of Agricultural Economics
400 Charles E. Barnhart Bldg.
Lexington, KY 40546-0276

Phone: 859-257-5762

Fax: 859-323-1913

<http://www.uky.edu/Ag/AgEcon/>

Valerie Vantreese Askren may be contacted by e-mail at vaskren@uky.edu

This publication was published in:

Valerie L. Vantreese. "Hemp Support: Evolution in EU Regulation." *Journal of Industrial Hemp*.
Institut National de la Recherche Agronomique, Unite Sol et Agronomie de Renne-Quimper.
Volume 1, No. 1. Spring 2002.

The College of Agriculture is an Equal Opportunity Organization.

Hemp Support: The European Union Experience

DRAFT

Valerie L. Vantreese
May 2001

Ms. Vantreese is an economist with the Department of Agricultural Economics, College of Agriculture, University of Kentucky. She can be reached at

Valerie L. Vantreese
406 Agricultural Engineering Building
Department of Agricultural Economics
University of Kentucky
Lexington, KY 40546-0276

(859) 257-7272 Ext. 259
vaskren@uky.edu



Hemp Support: The European Union Experience

DRAFT

Send comments to:

Valerie L. Vantrees

Agricultural Economist, University of Kentucky

vaskren@uky.edu

May 2001

Introduction

Interest in commercial hemp production continues to grow in the United States. To date, eight states have authorized marketing and production studies of industrial hemp (Hawaii, Kentucky, Maryland, Minnesota, Montana, New Mexico, North Dakota, and Virginia), while none have legalized commercial hemp production. Ultimately it is the Drug Enforcement Agency (as mandated by federal statute), who has the authority to permit hemp production (for research or commercial purposes), despite state attempts to usurp this power. That is, DEA approval must be obtained for all hemp production, regardless of state endorsement. If industrial hemp production were legalized in the United States, it would surely exist in a strict regulatory environment.

As these and other states contemplate full-scale commercial production, the experiences of Canada and the European Union (EU) can be insightful. Both Canada and the EU have diverse agricultural sectors that are well-supported by government programs, similar to that of the United States. Although each has legalized hemp production, neither Canada nor the EU has been able to develop a significant hemp processing sector.

Canada legalized hemp production in 1996 and licenses commercial production for those varieties of cannabis sativa L. with less than .3% tetrahydrocannabinol (THC) content. Farmers must pass very stringent security checks, provide GPS coordinates of the plots, and be subject to surprise crop inspections to confirm THC levels. Notably, beyond defining and defending the regulatory environment, the government of Canada does not provide any direct monetary support for hemp production or processing.

In contrast, hemp production in many European countries, notably France, has never been prohibited. In addition, the European Union provides incentives -- including direct monetary aid to farmers and processors -- to support revive their domestic hemp industry. Why has the EU been so proactive in supporting their hemp market?

The EU has a tradition of providing extensive subsidies to many, if not all, of its agricultural industries, and hemp is no different. It could also be said that the EU has a much stronger environmental voice, as evidenced by the existence of a bonafide Green Party, the highest rate of organic food consumption per capita of the industrialized nations, and arguably some of the best

public mass transit in the world. Consequently, tax rates in western Europe are much higher than that of the United States, as many in the EU have voted with their Euros to support social goods. Finally, it could be argued that western Europe has more tolerable attitudes towards drugs and personal choice than many other countries. In conclusion, the EU has been much more receptive towards alternative crops such as industrial hemp that hold promise of environmental and social benevolence.

Many advocates in the United States have argued that, despite our history of production, the industrial hemp market is a classic infant industry case. The argument goes that unless domestic supply exists, the market cannot

Many believe that the hemp market is a classic infant industry and deserves special protections

develop; and without market demand the agricultural sector will not risk producing hemp. Others have gone further and contended that subversive actions by the petroleum and paper industries have intentionally kept hemp a marginal crop. Consequently, some believe temporary government assistance is required to resuscitate the hemp market, as has been provided to other agricultural sectors such as the wine, mushroom and thoroughbred horse industries. If the infant industry argument is accepted, there may be some justification for providing market assistance to revitalize the U.S. hemp industry.

Conversely, arguments against legalizing hemp production - let alone providing government support! -- are huge and politically precarious. Most staunch hemp advocates feel that legalization alone would be a enormous victory. However, even if government assistance is never forthcoming for the U.S. hemp industry, what can we learn from the European experience? What kinds of support has the European Union provided their hemp farmers? What problems have they encountered trying to revitalize this industry? Has hemp aid worked?

EU Hemp Legislation

Historical hemp production in the European Union has followed a trend similar to that of the United States and the rest of the world. Beginning in the mid to late 1880s, lower cost and higher performance alternatives to hemp fiber and oil (both natural and synthetic) reduced hemp production to negligible amounts. In an attempt to diversify its agricultural base and to

The European Union began subsidizing hemp and flax production in the 1970s

encourage the production of alternative fibers, the European Union began subsidizing hemp and flax production in the 1970s.¹ EU

¹The founding legislation providing aid to the hemp industry also provided support to the flax industry. Subsequent amendments to this legislation affect both fiber crops. While this

legislation was developed under the assumption that volatile hemp prices discouraged rational production and marketing of hemp and flax, and that current hemp production was not sufficient to meet hemp demand. It was further believed that Community standard provisions were needed to govern contractual relations between the growers and the processors.

Specifically, Regulation (EEC) No 1308/70 of the Council of the European Communities attempted to “facilitate the adjustment of supply to market requirements” for flax and hemp by constructing:

- (a) measures to promote better organisation of production, marketing and processing into fibres of flax straw and hemp straw*
- (b) measures to improve quality*
- (c) measures to promote research into new uses*

To achieve these objectives, the European Commission defined a regulatory environment in which *Cannabis sativa* L. could be produced and targeted for monetary subsidies or “aid”. The EU regulatory environment restricts hemp production to full-time farmers, requires the use of EU-certified varieties that contain less than .3% THC, and defines various modes of verification and oversight on program compliance.

Aid to the hemp industry is provided not only to hemp farmers -- fiber processors are also eligible for processing aid. The amount of aid provided for hemp fiber production is fixed on a per hectare basis,

For the 2000/2001 marketing year,
hemp fiber subsidies are EUR 646.31 per hectare
or US\$ 228 per acre.

with consideration given to the amount proposed to be produced and marketed. The subsidy is determined by the amount grown (“crop declarations” that are submitted prior to the growing season) and the total pool of money committed to subsidizing hemp and flax. For example, in the 1999/2000 growing season, EUR 88 million (US\$ 76 million) was available for hemp support, resulting in an average expenditure of EUR 721 per hectare (US\$ 254 per acre). For the 2000/2001 marketing year, hemp fiber subsidies are EUR 646.31 per hectare or US\$ 228 per acre.

Provisions are made to limit the amount of fiber that is eligible for aid. “National guaranteed quantities” vary by Member State (those 15 individual countries that make up the EU) and by marketing year. To be eligible for the aid, each farmer must have a contract or commitment to process the hemp prior to production. However, the actual amount of total fiber aid granted is only known after processing (thus yield) is complete.

While the original 1970s legislation “legalized” industrial hemp production in the EU, individual Member States may or may not choose to participate. For example, England did not legalize

discussion focuses on hemp, remarks regarding flax will be incorporated periodically.

hemp production until 1993 and Germany in 1996. Conversely, France has never made hemp production illegal and has a long tradition of producing seed hemp. Consequently, EU farmers in non-participating Member States are not eligible for hemp subsidies.

Not all Member States of the EU participate in the hemp aid scheme,
therefor all EU farmers are not eligible for hemp aid

Processors must also submit applications for authorization to receive processing aid. The details of the processing contracts between the farmers and the processors is tightly regulated. Although not part of the original legislation, farmers can now apply to be “processors”. (Again, only hemp fiber under contract to be processed is eligible for aid.) If Member States do not receive enough applications for aid, the national guaranteed quantities can be reallocated to accepted primary processors and farmers (“persons treated as processors”) in other states. Advances of aid can be paid to the authorized processors and are equal to 80% of the aid corresponding to the quantities of fiber declared.

Difficulties Encountered with EU Hemp Support

As with most government programs, legislation must be continually fine-tuned as market conditions change and individuals learn how to “work the system”. Many of the difficulties that have erupted affect both the hemp and the flax markets, and have occurred in other commodity programs as well.

Subsidy Chasing - The Case of Price and Yield

In some Member States hemp and flax aid has led to purely speculative production. Subsidies afforded to these fiber producers and processors are significantly higher than that of competitor crops. This has resulted in hemp and flax being sown not for commercial production but for access to aid rates that are higher than that of other arable crops. The European Commission has been working to reduce aid rates for flax and hemp to those of competitor crops. Payments for flax and hemp should equal that of linseed, and must be aligned with those for cereals by the 2002/2003 marketing year. These fibers will then fall into the same general support scheme as for arable crops (cereals) of EUR 63 per ton (US\$ 56). Assuming a minimal yield of two tons of per hectare, subsidies will fall to about EUR 126 per hectare.

Subsidy chasing has resulted in greater acreages of hemp planted, yet lower yields than might otherwise be realized

Since aid is given on a per hectare basis, the incentive to maximize yields and engage in true commercial hemp production has faltered in many cases. Subsequent legislation to combat this problem has not always been successful and has, in some cases, been overly complicated. Amended

legislation (which began in the 1999/2000 marketing year) now requires a minimum yield to be

established for each Member State, ranging from 1.5 to 2.5 tons per hectare for non-deseeded hemp straw. Allowances are given for adverse weather conditions and other factors that may reduce yields and partial payments may be made in the case of yields that fall below the minimum required.

Unlawful cannabis sativa l. production

While problems of vandalism in licit hemp fields and illicit production of cannabis are rare, some problems do persist. The European Commission has reduced the THC content of hemp grown for fiber to less than .2%, beginning with the 2001/2002 marketing year. Further restrictions will be imposed to prevent illegal cultivation of hemp for the production of psychotropic substances, while shedding of “unnecessary extra controls intended to prevent hemp cultivation for cannabis production”.

Beginning in 2001/02, the European Commission has reduced the THC content of hemp grown for fiber to less than .2%

To better regulate the THC content of authorized hemp production, Member States must develop a system for verification on 20-30% of the areas grown for hemp fibre. Penalties can be imposed if States do not conform to the regulatory specifications. For example, the marketing year for hemp is very tightly defined. In 2000 Britain was asked to pay back £300,000 (US\$ 430,000) for allowing the harvesting of hemp earlier than permitted.²

Exchange rate fluctuations

All hemp aid to farmers and processors is calculated in Euros. If the value of the Euro relative to the Member States currencies devalues by certain margins, transitional agrimonetary aid may be provided to hemp farmers and processors. Fifty percent of the agrimonetary aid will come from the European Commission and a noncompulsory 50% from the Member State. For example, an additional EUR .12 million (US\$ 106,000) of transitional agrimonetary aid was allocated to the hemp sector in 1999. Similar exchange rate risks are apparent with other commodity support programs.

Volatility in Hemp Production

Since 1970, hemp fiber production in the EU has continued to be quite volatile. However, in recent years production has climbed significantly, due in part to hemp subsidies considerably higher than competitor crops. In addition, significant investment has gone into processing plants, partly using EU government-provided grant aid. For some countries, such as Wales, this has been part of a larger economic development diversification strategy. In spite of these investments, existing regulations have not been able to effectively deal with the current oversupply of hemp on the European market.

² The subsidy amount returned may have been due to the fact the seed had not set as required by EU subsidy rules. Those rules, originally written by the French, of requiring setting seed before harvest, which favored the French varieties, have been removed and are no longer required for EU subsidy. (Personal correspondence: David Watson IHA Chairman.)

Perhaps surprisingly, the EU “has no official figures on the volume of hemp grown. The acreages declared by Member States and indicative yields give a figure to be treated with caution, of around 30,000 tonnes of hemp fibre” (European Commission, Fall 2000). Other hemp production estimates are provided in the table below.

Year	Hectares	Metric Tons	Source
1999/2000	not reported	30,000	European Commission
1999/2000	not reported	25-30,000	nova institute
1999	32,000	not reported	<i>European Report</i>
1999	10,000	12,000	FAO/UN ³

Nonetheless, significant increases in hemp production has been deemed a budgetary burden by Members of the European Parliament. Proposed legislation that curbs hemp production is more accurately an attempt to curb aid. Of course the key concern is – Is there enough demand in the EU for the existing level of hemp production?

Market Demand

Hemp fiber produced in the EU has gone to a variety of uses. However, most of the market information is rather anecdotal and suggests a niche market of limited scale. Examples of hemp markets in various Member States follow.

Hemcore, one of the largest hemp companies in England, currently contracts about 2,000 acres of hemp for hurd production (the woody inner core of the stalk) for use as horse bedding. Hemcore is also working on developing spinning technology. Another UK company, Friendship Estates, sells hemp bedding for the pet industry. The Bioregional Development Group in Surrey has been researching flax and hemp for textiles and paper production. The hurds and seeds could also be used for composite board, linoleum, and animal feed.

Last November, a conference “Natural Fibres for the Automotive Industry” was held in Manchester England. According to organizers, about 15,000 tons of natural fibers (flax, hemp,

³ The Food and Agriculture Organization (FAO) of the United Nations only includes amounts produced in France, Spain, and Austria. The primary difference with the EC estimate lies in additional hemp production in Germany, England, and the Netherlands not reflected in FAO statistics.

jute and kenaf) are currently being used by the auto industry for a variety of interior components. Conference presenters included Audi, Techfibre, Concargo and Saneco.

Much of Germany's hemp fiber production has been shipped to France and Spain for the pulp industry. However, as the market has developed companies have been producing products as diverse as hemp soda pop and biodegradable plastics. Processing machinery has been developed by two German companies, Badische Faseraufbereitung and Bahmer. The automobile industry has also expressed interest in fibers for use in compression molded dash board covers and door covers.

Most of the hemp fiber grown in France has been used in the animal bedding industry. A small portion of production also goes to building materials, textiles, and specialty papers (such as cigarette papers and bank notes).

In addition to the usual array of body care products (lotions, oils, shampoos etc), HempFlax of the Netherlands (est. 1994) has actively been engaged in developing harvesting and processing equipment. They have also designed a decortication machine line (for separation of the strong bast fibers and woody core fibers).

Again, most of the EU demand information is anecdotal and true market demand is elusive. However, the amount of hemp aid provided to farmers and processors has grown significantly. Members of the European Parliament have been supporting the European Commission attempts to further reform the hemp and flax scheme. This suggests that reducing budgetary outlay has surpassed in importance Parliaments attempts at contriving market equilibrium (the original goal of the 1970s legislation).

Legislation to Reduce Budgetary Outlays

Community spending for the hemp and flax schemes has increased from EUR 74 million in 1995 to EUR 158 million in 1999 and EUR 173 million in 2000 (or US\$ 153 million). To reduce these costs, the European Commission proposed new reforms in 1999, to commence with the 2001 marketing year:

1. Reduction in Area Payment Arrangements

Flax and hemp are to be included under the arable crops regime, with the area payments to be brought down to the level of area payments for cereals. This will occur in three tranches. (Also discussed above: Subsidy Chasing.)

2. Increased Support in Processing Aid Per Ton

Despite the lowering of aid amounts, the European Commission claims that actual purchase prices to hemp farmers who process hemp themselves should rise as they become eligible for direct subsidies. Originally, direct subsidies (area payments) only went to farmers who contracted with processors.

In addition, farmers who process their own hemp fiber will also be eligible for processing aid (which previously had gone only to processors). The Commission has proposed doubling the processing aid rate from EUR 40 to EUR 80 per ton (US\$ 35 to 70 / ton).

Farmers will be eligible for processing aid of EUR 80 per ton (US\$ 70), beginning in 2001.

Although the Commission acknowledges that hemp fiber has “little market value” they believe aid is necessary “to support the development of innovative products made from it (such as insulation materials in the construction industry)...as well as continuing to support the traditional textile industry”. The impurities limit will also be raised from 5% to 7.5%.

3. National Production Quotas

Currently there is no limit on acreage sown for hemp and flax fiber, and cultivation has increased dramatically over the last five years. To stabilize budgetary resources going to hemp processing aid, the Commission has proposed a new maximum guaranteed quantity (MGQ) established for fibers. The EU-wide MGQ for short flax fibre and hemp fibre will be 119,250 tons and will be allocated amongst Member States. The national guaranteed quantities for hemp and flax fiber will then lapse beginning in the 2005/2006 marketing year. These supply controls should result in a fall in spending from about EUR 80 million in 2000/2001 to EUR 50 million in 2005/2006 (for flax and hemp schemes).

Beginning in the 2001/02 marketing year, aid will be limited to 119,250 tons of hemp and short flax fiber production. In the 2005/2006, the supply control will be lifted as the hemp and flax aid per hectare will fall to that of cereals

Other supply changes include exempting hemp and flax production from set-aside obligation and including non-arable land in the support system for both fibers.

In total, these reforms should whittle over EUR 100 million from the flax and hemp regime by 2005. Members of the European Parliament want an initial review of the hemp and flax aid scheme in 2002 and a more thorough review in 2005. In particular, Parliament want to assess the impact of processing aid on producers, market trends, and the development of innovative products. Concern exists over whether the hemp and flax fiber markets can survive without the existing level of monetary assistance.

Implications for Future Hemp Production and Prices

While Canada legalized the production of industrial hemp via the free market model, the European Union took a decidedly different tact. For 30 years the EU has worked to support hemp and flax production, albeit most intensively in the last five years, at a cost of EUR 721 per

ton in the 1999/2000 marketing year, plus processing aid of EUR 40 per ton. How does this level of support correspond to world hemp prices?

Using FAO/UN trade data, EU import prices in 1999 were EUR 1156 per ton (which includes cost of the fiber, insurance and freight), while export prices averaged EUR 1026 per ton. Consequently, total aid subsidies of EUR 761 per ton were about two-thirds of the import price and three-fourths of the export price.

With the proposed drop in hemp aid prices to EUR 63 per ton in 2002/03, it will be very interesting to see how EU production responds. Although the increase in processing aid will partially offset this reduction in production aid, the elimination of the subsidy-chasers and the new maximum guaranteed quantities will result in a decline in EU hemp production.

However, if the EU hemp processing market continues to grow, shorter hemp supplies could cause upward pressure on prices. The real test is whether the EU hemp industry is strong enough to absorb those price increases, and whether hemp can remain competitive against other natural and synthetic competitors. While most policy decisions are not economic ones, EU hemp support has been an intriguing exercise in supporting green politics with economic subsidies. As the U.S. hemp debate continues, it is essential to understand the competitive environment.