RESEARCH PAPER: 1993-1

POSSIBLE IMPACT OF CAP REFORM ON FLORIDA'S CITRUS PULP INDUSTRY

BY

Karen J. Bedigian, Economic Research Associate Robert M. Behr, Market Research Director

FLORIDA DEPARTMENT OF CITRUS

Economic and Market Research Department P.O. Box 110249 Gainesville, Florida 32611-2049 USA Phone: 352-392-1874

> Fax: 352-392-8634 Email: jonqying@ufl.edu

www.floridajuice.com

Possible Impact of CAP Reform on Florida's Citrus Pulp Industry*

Citrus pulp, a by-product of the citrus juice processing industry, is used primarily as a component in dairy feed rations. Florida and Brazil are the world's major citrus juice processors and thus, the largest producers of citrus pulp. The European Community (EC) is the primary market for this product.

Citrus pulp is exported to the EC because it is more competitive there relative to domestic markets both in the U.S. and Brazil. Within the EC, the Common Agricultural Policy (CAP) has created a situation whereby imported nongrain feed components are significantly more price competitive than EC produced feed grains. The CAP has forced EC grain prices above world prices compelling EC compound feed manufacturers to substitute relatively less expensive feed components (e.g. citrus pulp) for EC grain.

As is the case for most non-grain feed substitutes, citrus pulp does not face tariff and nontariff barriers, as do grains. Reform of the CAP due to EC budgetary conditions/constraints, the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) negotiations, and/or trade wars will have implications for the Florida citrus pulp industry. This paper provides a brief overview of the citrus pulp market, current CAP policies, CAP reform, and the possible consequences of CAP reform on the citrus pulp market in the EC.

Prepared by Karen J. Bedigian, Economic Research Associate, Florida Department of Citrus, August 13, 1993. Coauthored with Robert M. Behr, Economic and Market Research Director, Florida Department of Citrus.

Citrus Pulp Industry

When animal nutrition research indicated that citrus pulp was a viable nutritional source for livestock, citrus processors turned what was previously a waste product into a marketable feed component. Its principle usage is as a component in dairy feed rations.

Florida and Brazil are the world's major producers of citrus pulp, mainly, for export to the EC. Florida was the primary exporter until the 1980's when Florida suffered heavy citrus production losses from freezes. Florida's reduced citrus production combined, with substantial Brazilian increases in citrus production, led Brazil to become the world's major citrus pulp supplier. Estimates place the 1991-92 marketing season's citrus pulp exports for Florida and Brazil at 438 and 975 thousand metric tons respectively (1,2).

Historical prices of citrus pulp feed are not available as the Florida Agricultural Statistical Service (FASS) discontinued reporting this data in 1982. Unofficial price statistics are available from *Feedstuffs Newspaper* (3) and the *Southeastern Dairy Outlook*(4). Over the past two years the citrus pulp price (FOB Florida processor) ranged from a low of 90 to 120 dollars per ton.

The Netherlands and Germany are the principal EC compound feed manufacturers; the Netherlands accounting for the majority of imports of feed components. Within the EC, Germany and France are the major producers of primary feed products.

Compound feed manufacturers generally seek least cost inputs given the nutrient requirements of specific feeds. Each commodity's nutritive role is dependent upon the other ingredients with which it is being mixed and the type of ration being produced.

¹Florida's marketing season: December through November. Brazil's marketing season: July through June.

As with any good, the relative prices of citrus pulp's substitutes and complements affect its demand and, thus, its price. Schmidt and Gardiner (5) have summarized the findings of numerous studies on various issues of nongrain substitutes in the EC. Most studies agree that nongrain substitutes, such as citrus pulp, and high protein feeds (corn gluten feed) substitute easily for grains while complementing each other. Thus, the demand for citrus pulp for use in dairy rations is highly sensitive to the price of citrus pulp and the price of competing grains.

Factors Affecting Demand For Citrus Pulp

The EC demand for nongrain feeds is affected by the following: 1) high internal prices for grains; 2) milk and milk byproduct quotas; 3) the accession of additional countries into the EC or the European Free Trade Association (EFTA); 4) the availability of European sugar beet pulp; 5) the value of the US dollar; 6) barriers to trade in relation to non-grains, grains, and milk and milk by products; and 7) and, whether, the compound feed industry is expanding and or contracting. The world exchange rate and internal green rates also play an important role in determining trade.

A number of the factors listed above are a direct consequence of the CAP, which manifests one of the highest levels of trade protection in the world. A generalization of the CAP's objectives are: 1) self-sufficiency; 2) protection of EC producers from world market supplies and price fluctuations and lastly; 3) providing EC producers access to export markets by subsidizing EC exports.

The principal commodities under the CAP which may affect the marketability of citrus pulp in the EC are grains, oilseeds, and dairy products. Each of these commodities is supported

by the CAP through various agricultural policy instruments. The policy instruments used are target prices, intervention prices, threshold prices, variable import levies, quotas and export restitutions. These policy instruments create an environment in which non-grain substitutes are less expensive than grains, whether domestically produced or imported.

Each year the CAP establishes target, intervention, and threshold prices for the following season. Target prices represent what is "generally agreed upon" to be the optimal wholesale price; albeit not a guaranteed price. Intervention prices act much the same as the US loan rate for grains. When market prices reach the intervention price, intervention agencies buy market surpluses in an attempt to stabilize market prices. Thus, the intervention price acts as a minimum price EC producers receive and, also, establishes a ceiling for imported nongrain substitutes, such as citrus pulp. Maximum guaranteed quantities (MGQ) have been established for some products, such that, if seasonal production exceeds the MGQ, the intervention price established for the following season will be reduced by a percentage tied to the over production of the MGQ. The target and intervention prices tend to promote EC agricultural surpluses while maintaining intra-EC prices above world prices.

In order to further stabilize and insulate the EC farmer's returns from world market fluctuations the CAP protects its domestic market through the institution of threshold prices and variable levies applied to imports. Imports may not enter the EC at a price less than the established threshold price, which is usually close to the target price. A variable levy added to the CIF² import cost brings the price equal to the threshold price.

²CIF: Price of a good that covers the cost of the commodity, shipping and freight insurance.

Because these CAP policies result in EC prices above world prices, EC products can not compete on the world market without being subsidized. The CAP provides export restitutions (subsidies) to exporters based on the price differential between port of destination and internal EC prices.

CAP Reform and Possible Impacts

The CAP provided the incentive for significant investment in EC agriculture causing significant growth in EC agricultural budgetary outlays, increased product surpluses and a decline in per capita consumption growth due to relatively high food prices. All these factors, plus, participation in the Uruguay Round of GATT have precipitated CAP reform. Some of the latest CAP reforms which may impact the EC demand for citrus pulp are:

- a) Grains and oilseeds: Most importantly, intervention prices will be decreased 29% over the next three years, beginning with the 1992/93 season. Established target prices will decline in line with intervention prices.
- b) The support price for butter and milk will remain at 1991/92 levels, but, in order to reduce EC expenditures in this sector, milk quotas will be reduced.
- c) Large farms will be required to set aside 15% of their arable land.

Reform of the EC's CAP will have an impact on the demand for citrus pulp, as demand is highly responsive to price changes for both its substitutes and complements. By reducing internal EC grain prices CAP reform is expected to stimulate demand for EC produced feed grains, thus reducing the demand for imported nongrain feed substitutes such as citrus pulp.

However, lower grain prices should stimulate increased overall farm level demand for feed, which could lessen the decline in demand for imported nongrain feed substitutes for feed compounding.

According to one study (7), a decline in EC grain prices would increase feed-grain demand by compounders and could to some extent increase the demand for nongrain feeds. Since the dairy quotas would likely result in a reduction in herd size, it is more likely, however, that nongrain feed demand in the EC will decline.

While lower EC feed grain prices are anticipated under CAP reform, acreage set asides are expected to reduce over production of grains, which could mitigate significant price declines. Whether acreage set asides will be effective will depend on the reactions of EC farmers. As in the US, farmers may 1) remove from production their least productive acreage, and/or 2) use more intensive production practices. If EC producers respond in the aforementioned manner the set aside program will have limited impact on prices.

It has also been reported that through GATT, the EC is attempting to place tariffs on nongrain feed substitutes, citrus pulp included. This measure would also act to reduce demand for citrus pulp imports.

Implications

As a consequence of CAP reform and possible tariffication of citrus pulp through GATT, Florida processors could expect in the long run to experience reduced demand for their product in the EC. As such, Florida's citrus industry may have to pursue additional market outlets for its citrus pulp byproducts. Moreover, given the expected growth in Florida citrus production, and

the consequent increase in citrus pulp supplies, the need to expand market opportunities becomes even more important.

BIBLIOGRAPHY

- 1. Florida Citrus Processors Association Statistical Summary 19XX-XX Season. Florida Citrus Processors Association. Various annual issues. Winter Haven, Fl.
- 2. Florida Department of Citrus. Unpublished data. 1992
- 3. Feedstuffs: The Weekly Newspaper for Agribusiness. Minnetonka, Minnesota.
- 4. Southeastern Dairy Outlook. Dairy Farmers, Inc. Orlando Florida. Vol. 29 through 32.
- 5. Schmidt, S. and W. Gardiner. 1988. Nongrain Feeds: EC Trade and Policy Issues. USDA, Economics Research Service, Foreign Agricultural Economic Report Number 234. Washington, D.C.
- 6. Henry, Carla. (1991). "The Implications of the EC Single Market for Agricultural Input Industries". EC 1992 Implications For World Food And Agricultural Trade: Proceedings. USDA, Economic Research Service, Washington, D.C.
- 7. Ann Marie Hillberg. 1986. "Limiting EC grain substitute imports: A simulation model of the West German Manufactured feed economy." *European Review of Agricultural Economic* (13), pgs. 43-56