Soybean outlooks differ in London

Summary

The American Soybean Association's 5th European Outlook Conference was held in London this fall, with speakers discussing the effect on international soybean trade of trade protectionism, the production outlook for the 1984/85 marketing year, and the differing conclusions on the outlook for soybean markets through the end of the century provided by an ASA report and one by *Oil World*, the weekly German fats and oils newsletter. AOCS Assistant News Editor Sara Arndt prepared the following report.

The American Soybean Association's 5th European Outlook Conference, held in London this autumn, attracted 150 delegates from 15 countries, including Pakistan, Romania and Hungary, as well as the EEC countries and the United States. Most were buyers, oilseed crushers, refiners, traders and agricultural leaders from Europe who came to hear some of the US predictions for soybean and oilseed trading in 1985.

The ASA outlook conferences are designed to examine the opinions of experts on the immediate future of the supply and demand of feed grains, animal by-products and other raw materials. This year, the October meeting—which featured papers given by a congressman, an assistant secretary of economics for the USDA and the ASA director of corporate relations and economics—concentrated on political and economic issues and their likely effect on the oilseeds industry.

U.S. Rep. Charles Stenholm, a third-generation farmer and rancher, is a member of the House Agriculture Committee and several of its subcommittees. He is known for his conservative viewpoint on governmental fiscal responsibility and for his support of the nation's agricultural industries.

Stenholm's opening statement, "gone are the days when American farmers or European farmers were pretty much isolated from the world marketplace," set the tone for the conference, at which speakers expressed the view that America's new direction in agriculture must be a departure from the traditional "farm policy" which has, in the past, been isolated from international fiscal, monetary and trade policies.

Stenholm stressed that today's global economy is a "cobweb of interdependence" and that as economies become more interdependent, the U.S. is more affected by the domestic politics of its trading partners. Although he believes that the U.S. Congress does not want to see reductions in the current U.S. share of world markets, he expressed the need for better cooperation with the EEC and other countries, to work on market expansion, not market division. "We should be allies against protectionism—the age-old enemy of prosperity," Stenholm said.

Stenholm believes the U.S. government should reaffirm anti-embargo protection, expand U.S. farmers' access to foreign markets, direct international talks toward more free and open trade and renew its commitment to basic oilseed research.

USDA Outlook

The USDA oilseeds and grains outlook for 1985 was presented by Dr. W. Lesher, USDA assistant secretary for economics. He said soybeans are America's "miracle" crop, and one of the fastest growing areas of agriculture, both in the U.S. and the rest of the world. Today, Lesher said, the U.S. accounts for about 60% of world soybean production and for about 85% of world trade in soybeans. He pointed out that the U.S. share of trade in soybean products, namely meal and oil, is far less significant, with the United States maintaining around 20-25% of the world market share. According to Lesher, policies by a number of countries which favor investment in soybean crushing have cut the U.S. competitive position in world soybean processing.

The U.S., however, remains a large exporter of soybean meal and oil. The combined export value of soybeans and related products has ranged from $7.5 to $8 billion in recent years, Lesher said, adding that this represents close to 20% of the total value of U.S. agricultural exports.

The USDA forecasts that 1984/85 world oilseed production will reach a record 186 million tons, as record oilseed crops outside the U.S. combine with a recovery from 1983's drop in U.S. oilseed output. Production outside the U.S. has expanded steadily during the past five-year period, whereas U.S. production of all major crops has slowed, due to reduced demand, two major droughts and significant acreage reduction programs for corn and wheat during the same period. At the same time, Lesher noted, increased incentives for oilseed crops elsewhere have encouraged expansion in oilseed crops, particularly rapeseed and sunflower.

Most of the trends in oilseeds and oilseed crush in the past five years are disturbing to the U.S. because of its loss of overall world market share, Lesher said. The world recession, a strong dollar and the debt burden of many of the developing countries have been factors in some of the loss. However, he reiterated that policies by some foreign competitors, which have led to increased production and processing along with a growth in demand, also have been important.

Lesher's report gave prospects for soybeans worldwide at a total output of 94 million tons in 1984/85, up 17% from last year and only marginally below the record 1979/80 crop of 93.7 million tons. U.S. output will be up sharply from last year's drought-reduced crop, at more than 55 million tons.

Record crops are forecast for sunflowerseed, rapeseed and cottonseed in 1984/85. France is experiencing unusually good results; its rapeseed crop is expected to reach a record 1.2 million tons, up 300,000 tons from last year.

In a discussion of agricultural policy issues that may be debated next year, Lesher explained that the U.S. traditionally enacts a new farm bill every four years, with a new government. This year, the subject is of particular interest, Lesher says, because agriculture is the largest industry in America, closely tied to global matters, and U.S. agricultural exports have fallen for four consecutive years. Acreage has continued to expand elsewhere while the U.S. has removed 113 million acres from production since 1980. The prospect for increasing exports in the near future is not as good as could be hoped, he said. Lesher points out that

U.S. farm programs—commodity loans, target prices, acreage reduction programs and reserves—have been essentially a continuation of farm policies of the past 50 years.

Given that today's agriculture has changed so much, since it now depends so heavily on world markets, many are raising serious questions about these basic components, he said. For instance, some say that voluntary acreage reduction programs have been largely ineffective because farmers who choose not to participate may expand acreage hoping to benefit from higher market prices, the payment limitation makes participation less attractive to large units, yields continue to go up on acreage not idled and, as the U.S. is the only country which follows the acreage reduction program, it is beginning to show in exports and in the general health of the industry.

ASA, *Oil World* Reports

The debate which brought most interest from participants at the 1984 conference centered around the two long-range forecasts for soybeans by Siegfried Mielke, editor of *Oil World,* and Dennis Sharpe, the ASA's Director of Corporate Relations and Economic Analysis.

Both began their papers by describing the methodology they had used to gather statistics and make their forecasts, and went on to give figures for production, consumption and trade and to discuss where their studies agreed and why they differed.

The ASA's "Project 2002," Sharpe explained, was intended to bring together some of the best thinking available on the trends in the industry in order to develop choices to help shape the future for the benefit of the U.S. soybean farmer and others involved in the soybean industry. A panel of decision-makers was interviewed, and their major concerns regarding soybeans included international "nearsightedness" (a trend toward protectionism) and U.S. government policy; panelists feared that the current depressed situation in U.S. agriculture may result in counterproductive farm policies that could include production restraints for soybeans and artificially high price supports that ultimately would reduce U.S. world competitiveness.

More than 200 experts were surveyed and the study, as Sharpe points out, is "replete with survey findings and alternative scenarios that are the hallmark of the futurists' approach."

Of the three scenarios from Project 2002, Sharpe used the "most likely" to compare with Mielke's analysis. ASA results forecast a slow recovery and moderate growth in total high protein vegetable meal consumption—an annual rate of 4%, compared to an historic growth rate of about 5% over the past 20 years (Table I). Soybean meal's share of total oilseed protein consumption indicates a significant slow-down—the most likely growth rate being about 4.6%, significantly below the 7.5% annual growth rate of the past 20 years and even below the 6.7% rate of the past 10 years.

If the world economy improves slowly, total world soybean oil consumption could increase by 2.5 times by the year 2002. In the most optimistic scenario, it would triple to 45.7 million metric tons, but if stagnation persists, it would not even double (Table II).

The ASA report indicated that unless the world economy returns to a high growth mode, which is not deemed likely, a significant increase in world soybean production should not be needed until the late 1980s or early 1990s.

Mielke's report, in *Oil World,* was based on a determination of the framework within which the future of world markets is likely to develop—that is, population, politics, general economy, land availability, technology and climate. Statistics were compiled for 41 commodities and two major areas (the EEC and other Western European countries) including 12 major individual countries.

The study assumed a general economic growth rate of 3% and an annual population growth slowing from 2.1% to 1.4% by the year 2002. In technology, it was assumed there would be no major breakthrough in soybean and other oilseed yields until the mid-1990s. However, the most important premise of Mielke's forecast was that tissue cul-

Table I

Project 2002—Projected World Consumption of High Protein Vegetable Meal

	(Million metric tons) (SME)[1]				
Economic alternative	Actual 1981-82	1983-87	1988-92	1993-97	1998-2002
Stagnation	85.9	87.9	98.4	120.6	149.8
Fast growth	85.9	95.1	136.3	192.4	270.6
Moderate growth	85.9	92.1	112.0	147.7	194.3

[1] Soybean Meal Equivalent

Table II

Project 2002—Projected World Soybean Oil Consumption

	(Million metric tons)				
Economic alternative	Actual 1981-82	1983-87	1988-92	1993-97	1998-2002
Stagnation	13.3	14.0	15.8	19.8	25.2
Fast growth	13.3	15.0	21.8	31.6	45.7
Moderate growth	13.3	14.5	17.9	24.3	32.8

ture of the oil palm, resulting in high yields, will give the oil palm industry an edge over soybeans and other oilseeds until at least the mid 1990s.

He expects the demand for oils during the 1980s and 1990s to be relatively stronger than the demand for meals, due to the exceptionally high increase in palm oil production and the resulting lower oil prices, which will make oils increasingly attractive in nonfood uses as feed, fuel, etc., as well as in food uses. Mielke says these factors will favor a continued increase in per capita disappearance of oils and fats, although the rate of increase is expected to be only 1% annually, compared with almost 1.4% annually in the past 20 years.

Palm oil and palm kernel oil will enjoy the biggest growth of market shares in the field of oils and fats, and from the second half of the 1980s onward, he expects rapeseed and sunflowerseed to be particularly hurt by its competition.

Mielke's study predicts that total world demand for oilmeals will increase by only 68% from 1978-1982 to around 150 million tons annually on the average of the five years ending 2002. This compares with an increase of 70% in the demand for oils and fats in the same period. This prediction implies that the usage of oilmeals will slow in the course of the 1980s and 1990s.

Oil World says the rate of increase in the world crushings of the 10 major oilseeds will slow to 2.7% annually, compared with 4.7% during the 20 years ending 1982, although world soybean production will have to rise only at an average annual rate of 3% in the 1980s and 1990s compared with 7.5% in the past two decades.

As Dennis Sharpe points out, the two studies agree that:

—Long-term world economic growth will be much slower over the next 20 years than during the previous 20 years.

—Average economic growth will be around 3% for the next 20 years.

—The demand for high protein meal is going to slow markedly in the years ahead.

However, the ASA study sees the demand for meal increasing with the recovery in the world economy. The major disagreement between the two forecasts is that the ASA model is driven by meal demand, while the *Oil World* analysis is driven by rapidly increasing palm production forcing a sharp slowing in the growth rates of all other fats and oils including soybean. The ASA study assumes that the demand for meal will be relatively stronger than for oil, so that more oil is produced as a by-product and must find a home via lower prices. Although Mielke also believes oil prices will tend to be depressed, his reasoning owes this to increased production of palm oil, not to a stronger meal demand.

Mielke said he believes the ASA forecast was based on a population growth rate which he considers to be too high, and that its predicted vegetable oil consumption also is too high.

Audience reactions after the debate showed a concern that palm oil production may not see the fast rise that Mielke predicts, particularly since mechanical harvesting is still a long way away, and without it, some say that Malaysia will not be able to keep pace with oil palm production.

A talk by Dr. Labuda, of the British Crop Protection Council, reaffirmed that the increased EEC subsidies for rapeseed as an incentive for European farmers have encouraged the rapid growth of rapeseed cultivation in Britain, resulting in a lessening dependence on soybean oil imports from the U.S.

The American Soybean Association plans to return to London for next year's Outlook Conference.

Melvin Brauer

CasChem promotes Brauer

AOCS member Melvin Brauer has been named technical director for CasChem Inc., the specialty chemicals company in Bayonne, New Jersey. Brauer has been with CasChem and its predecessor companies, including Baker Castor Oil, for 12 years, most recently serving as manager of laboratory operations.

Three other appointments at CasChem have been announced by Frank Naughton, CasChem vice president of technology and a former AOCS president. Y. C. (Jack) Chu has been named a group leader, directing laboratory activities aimed at development of specialty chemicals and elastomers; William J. Downey is group leader for activities of the telecommunications and automative applications laboratory, and Manuel Sanhueza has been named a senior research scientist, directing activities of the urethane coatings laboratory.

New oil standards urged

A panel of chemists has recommended that new grades of cottonseed oil be provided for agrichemical chemicals manufacturers if vegetable oils are to compete with petroleum in the formulation of pesticides.

Cottonseed oil is widely used as a diluent or adjuvant, but its potential in formulation is still unrealized, said Lynn Jones, director of research and education for the National Cottonseed Products Association.

Jones spoke at a technical workshop jointly sponsored by NCPA and the National Cotton Council in Memphis during September. More than 20 formulation chemists from the agricultural chemical industry and oil chemists from the cottonseed crushing industry attended. Jones said defining and establishing suitable grades is the No. 1 priority for the

cottonseed industry if the oil's full potential is to be realized.

The group discussed how to identify properties that will allow cottonseed oil to compete with petroleum oils and solvents in pesticide formulations. The chief advantages vegetable oils enjoy over mineral oils are that they are natural products, generally not harmful to plants, and in generous supply.

The panel also examined cottonseed oil's physical and chemical characteristics in regard to compatibility with pesticide formulations, oil shelf-life, and degree of refinement.

The panel concluded continued research is needed to support the safety and efficacy of cottonseed oil with these vital chemicals.

AOAC honors Conacher

AOCS member H.B.S. Conacher of Health and Welfare, Canada, in Ottawa, was one of six persons named "Fellow of the AOAC" during the Association of Official Analytical Chemists' annual meeting this fall.

The other five recipients were S. M. Harmon of the U.S. Food and Drug Administration; M. Ihnat of Agriculture Canada; C. E. Jones, Colorado Department of Agriculture; K. McCully, Health and Welfare, Canada, and R. S. Wayne, American Cyanamid Co.

The AOAC's top award, the Harvey W. Wiley Award, was presented to John M. Bremer, professor of agronomy and biochemistry at Iowa State University.

270 attend seminars

Participants at one seminar use headsets to listen to simultaneous translations.

Panelists at seminars were (from left) Cor Van Eijk, Harshaw Chemie; Frank Veldkamp, LFC Lochem; Paul Gilbert, Harshaw Chemie; Keith Delaney, Harshaw/Filtrol Partnership, and Ken Carlson, Alfa-Laval.

Approximately 270 persons attended a series of five one-day seminars on edible oil processing held throughout South America earlier this year with speakers from Harshaw Chemie BV of The Netherlands, Harshaw/Filtrol in the United States, Alfa Laval in the United States and LFC (Liquid Filtration Consultants) of The Netherlands.

Approximately 90 persons attended the seminar in Sao Paulo, Brazil, which was the largest turnout on the tour, according to Paul M. Gilbert of Harshaw Chemie. Other stops were Valencia, Venezuela; Cali, Colombia; Lima, Peru, and Santiago, Chile. The smallest attendance was in Santiago with 35 persons participating.

Basic purpose of the seminar was to emphasize proper refining techniques before hydrogenation to minimize deleterious effects during hydrogenation, Gilbert said. Filtration speakers covered ways to remove catalyst from the hydrogenated product as well as improved filtration techniques for winterization and bleaching.

"One pleasing aspect was the lively discussions which took place both during the panel session and dinner afterwards," Gilbert said. "It certainly exposed a need, on behalf of the industry, in such faraway places as South America to have the opportunity to experience dialogue with experts in the field—not only to relay our knowledge to them but to be confronted with their individual problems and increase our own awareness."

Fats & Oils News

U.S. Soybean Crush—Third Quarter 1984

	Total capacity (thousand bushels)	Total crush	% capacity	Oil produced (thousand lbs.)	Oil yield	Meal produced (thousand tons)	Meal yield (lbs./bushel)
July	125,705	68,947	54.8	788,839	11.44	1,626	47.16
August	125,705	70,956	56.4	812,025	11.44	1,687	47.55
Sept.	121,650	65,444	53.8	753,880	11.52	1,552	47.42
Total		205,347	54.5	2,354,744	11.47	4,865	47.38

The National Soybean Processors Association, which provided the data given in the above table, announced in mid-October that it is ceasing its statistical collection and reporting program.

News Briefs

Robert M. Reeves, formerly director of the Food and Dairy Division of the Tennessee Department of Agriculture, has joined the **Institute of Shortening and Edible Oils.** He is slated to become president of the institute at the beginning of 1985 upon the retirement of **William Goodrich.**

Campbell Soup Company has completed the acquisition of the Casera group of companies, a canned food processor based in San Juan, Puerto Rico. Under the agreement, Campbell has acquired the Casera Brand's canned food operations and its olive and vegetable oils business.

Laurak C.A. of Caracas, Venezuela, has started up its new refining deodorizing system designed and supplied by EMI Corporation of Des Plaines, Illinois, in Turmero, Venezuela. The system features heat recovery equipment and a distillate recovery system for pollution control.

Fritzsche Dodge & Olcott Inc. has appointed George J. Haber its director of flavor applications worldwide and John Scire director of flavor research and flavor development for North America.

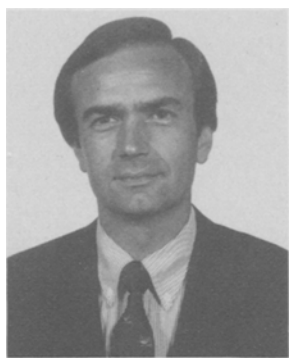
Robert W. Blackford has been named director of sales and marketing for **Geo. Pfau's Sons Co. Inc.** of Jeffersonville, Indiana, a producer of inedible animal oils for industrial use.

Anderson International Corp. of Cleveland, Ohio, has opened a field sales office, under the direction of Jim Hanson, in St. Louis, Missouri. The office's mailing address is PO Box 1596, Maryland Heights, MO 63043.

The **PQ Corporation** has appointed Craig T. Keeley manager of technical service in its industrial chemicals division.

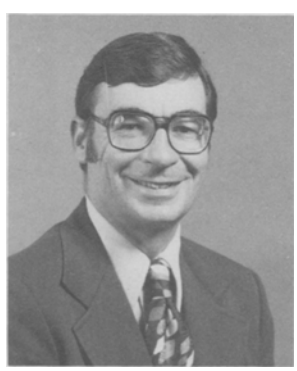
AOCS member **Charles H. Struble** of Plantation, Florida, this year spent three weeks in Soufriere, St. Lucia, and one week in Port of Spain, Trinidad, on consulting assignments as a volunteer executive with the International Executive Service Corps.

Struble, who retired in 1978, uses his expertise in the margarine field to give advice to companies served by the program. This year, Struble lent his talents to the Copra Manufacturers Ltd. in Soufriere, St. Lucia, and to the Coconut Growers Association Ltd. in Port of Spain, Trinidad. According to Struble, the St. Lucia firm is interested in using soybean and other oils in addition to coconut oils in its margarine operations. The Trinidad group, a growers' cooperative, also makes margarine. In past years, Struble and his wife have traveled to Guatemala, Peru and Turkey on other assignments with the International Executive Service Corps.



Robert Reeves

William Goodrich



New POS director

Roy A. Carr, an AOCS member since 1975, has been named executive director of the POS Pilot Plant Corporation in Saskatoon, Saskatchewan, Canada. The facility is a joint government-industry research facility specializing in proteins, oils and starches. The center researches methods for separating raw agricultural products into their components for processing into food products. Proprietary research work is done on a contract basis.

Fats & Oils News

1983 Canadian review published

The annual review, Fats and Oils in Canada for 1983, reports total oilseed crushings for the marketing year 1982/83 were approximately 1.95 million metric tons (MT), up 2% from the preceding year. The review was prepared and published by the Grain Marketing Bureau, Department of External Affairs.

Soybean crushings totaled 1.04 million MT based on domestic production of 857,000 MT and imports of 419,400 MT. Canola/rapeseed crushings totaled 904,100 MT, based on domestic production of 2.25 million MT. Canada exported approximately 1.27 million MT of canola/rapeseed during the marketing year.

Other domestically produced oilseeds include linseed, mustardseed and sunflowerseed.

Cyclopropene index

A table of contents of cyclopropene fatty acids in plant oils has been compiled by Australian researchers, covering information available through December 1983. Individual copies are available at no charge by writing to Dr. J. R. Vickery, CSIRO Division of Food Research, North Ryde NSW 2113, Australia.

Obituary

JAMES P. DUFFY

AOCS has been informed of the death earlier this year of James Patrick Duffy, regulatory compliance manager at Humko Chemical, Division of Witco Chemical, in Memphis, Tennessee. He had been an AOCS member since 1961.

Mr. Duffy received his bachelor's degree in chemical engineering from The Polytechnic Institute of Brooklyn in 1947. He had been with Humko since 1961, when he joined the firm's technical service department. Mr. Duffy served on several AOCS technical committees, including hydrogenated oils, commercial fatty acid, dibasic acids, fatty nitrogen and polyethylene in fats.

Publications

New Publications

Hydrogenation of Soybean Oil, proceedings of the 3rd American Soybean Association Symposium on Soybean Processing, June 7-9, 1983, in Antwerp, Belgium. Published by the ASA, Centre International Rogier, Box 521, 1000 Brussels, Belgium, 1984, 104 pp. Single copies available free by writing to ASA office in Belgium.

Instrumental Liquid Chromatography: A Practical Manual on High Performance Liquid Chromatographic Methods, 2nd Edn., by N.A. Parris, Elsevier Science Publishers, P.O. Box 211, 1000 AE, Amsterdam, The Netherlands, 1984, 432 pp., U.S. $86.50, Dfl. 225.

Introduction to Aerosol Science, by Parker C. Reist, Macmillan Publishing Co., 866 Third Ave., New York, NY 10022, 1984, 300 pp., $38.

Oilseed, Oil and Fat Processing, by E. Bernardini, B.E. Oil, Via Failla 63, 00128 Rome, Italy; two volumes, Volume 1, Raw Materials and Extraction Technologies; Volume 2, Edible Oil and Fat Processing, boxed set, approx. 650 pp. each, US $130 per set, $64 per volume.

NLGI Lubricating Grease Guide, edited by Melville Ehrlich, National Lubricating Grease Institute, 4635 Wyandotte St., Kansas City, MO 64112, 123 pp., $10.

Nutritional and Toxicological Aspects of Food Safety, edited by Mendel Friedman, Plenum Publishing Corporation, 233 Spring St., New York, NY 10013, 1984, 584 pp., $79.50. This is Volume 177 of the Advances in Experimental Medicine and Biology series, based on the symposium "Food Safety: Metabolism and Nutrition" held Oct. 27-29, 1982, in San Francisco, California.

Technology and Product-Mix Forecast—Oils & Fats in 2000 A.D., edited by V.S.S. Mani and V.V.R. Subrahmanyam, published by Oil Technologists' Association of India, Western Zone; 82 pp., 1984, US $10. Copies may be ordered from Prof. Subrahmanyam, University Department of Chemical Technology, Matunga, Bombay 400 019, India. This monograph contains papers presented at a workshop/seminar held during December 1983 and covers oilseeds production, processing, technology and product mix in terms of needs through the end of the century, including uses in foods as well as surface coatings and soaps and detergents.

From the American Institute of Chemical Engineers, Publication Sales Department, 345 E. 47th St., New York, NY 10017:

Heat Transfer—Niagara Falls 1984 (Symposium Series Volume 236), 97 papers and abstracts from the title symposium; 469 pp., $40 AIChE members; $60 to nonmembers.

New Developments in Liquid-Liquid Extractors: Selected Papers from International Solvent Extraction Conference '83, 19 papers from the ISEC meeting, 179 pp., paperbound; $17.50 to AIChE members, $35 to nonmembers.

Fundamentals of Adsorption, proceeding of an Engineering Foundation Conference held May 6-11, 1983, Bavaria, West Germany. 788 pp; $45 for AIChE members, $60 to nonmembers.