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THE MERCURIAL MOHAIR MARKET

The world mohair industry took a breather last year from the frantic ups and downs that have long dominated its history, according to the Foreign Agricultural Service. Production of mohair (the silky fleece of Angora goats) in 1967 declined about 4 percent from the near-record level of the preceding year, while preliminary data indicate little change in the volume of trade. In view of past trade swings in the mohair industry, research workers are persistent in their efforts toward developing uses for the commodity that are more highly dependent upon reliable demand than upon fashion cycles that disrupt long-range production and marketing plans.

The United States holds first place in the production of mohair, and most of the U.S. mohair is produced in Texas. The smaller world clip of mohair last year is attributed to a 4-percent decrease in the number of goats on farms and ranches in the United States, where the 1967 clip was off 5 percent (to a level of 28 million pounds). The year 1967 was the first time the United States registered a decline in output since it joined Turkey and South Africa as major producers of mohair.

Despite the decrease in world production of mohair, exports of this commodity on the world market continued to rise from the low level of 20.6 million pounds achieved in 1964. Shipments climbed to 33.1 million pounds in 1966, an increase due mainly to larger exports from South Africa and the United States. In 1967, mohair exports probably held steady with those in the preceding year.

The FAS says that neither dramatic gains nor losses are expected in the mohair industry during 1968. Traditionally, this "feast or famine" fiber — which to date has been used almost exclusively for apparel — has a reputation for wide and abrupt market fluctuations. This situation has led to extremely high production peaks in a number of years, with corresponding profits for both producers and processors.

Equally memorable, however, are the unfavorable years in the mohair industry. Price competition from wool led to a widespread replacement of Angora goats by merino sheep in South Africa between 1912 and 1930 and caused a sharp decrease in mohair production during those years. In 1957-58, a sharp decline in mohair output in Turkey resulted from outbreaks of foot-and-mouth disease and insufficient feed supplies. Style changes by the fashion industry influenced a 50-percent reduction in mohair exports in 1964 from the previous year's total — a drop that was followed by a record output in 1965.

The first Angora goats to reach the United States were brought to this country in 1849 by Dr. James Davis. Further imports were made in later years, and the raising of goats spread rapidly across the southwestern United States. Currently, about 97 percent of all the goats clipped for mohair in the Nation are in Texas. The remaining mohair is produced in Arizona, California, Missouri, New Mexico, Oregon, and Utah. The few goats in other sections of the country are kept primarily to rid pastures of brush.

Today, the United States is the world's largest producer of mohair, a position which it has held since replacing Turkey in that spot. Estimates for 1967 place U.S. output at 28.0 million pounds out of the world total of 62.8 million pounds. In 1956, the United States outranked Turkey for the first time; and 2 years later, U.S. exports of mohair—valued at \$11.9 million—accounted for over three-fourths of domestic output.

Another major change of recent years in the notably erratic market for mohair has been the rapid escalation of the United Kingdom to the place of the world's largest importer of this commodity. The increased consumption apparently is due to the British manufacture of a wide range of novelty fabrics made of blended fibers.

The development of new uses for mohair presents a problem because it is a specialty fiber for which man-made and other fibers can be substituted readily; however, the luster and durability of mohair make it uniquely well suited for use in certain worsted blends, plushes, and linings. Coarse, less expensive mohair is used for carpeting, draperies, blankets, and upholstery for automobiles and furniture. Although approximately 40 percent of the demand for mohair originates in the world's high-fashion clothing industry, some stabilization of the market has begun recently in line with increased nonfashion use of the fiber.

Despite current efforts toward market stabilization, which ultimately should lead to expansion, demand for mohair probably will remain for some time largely dependent upon fashion trends and economic prosperity in the Western World, according to the FAS. The extreme fluctuations in demand and prices of the past probably will continue to be characteristic of the industry.

More Fertilizer Instead of More Land

Research at the Oklahoma Agricultural Experiment Station shows that fertilizer is being substituted more and more for land and other capital. The acreage of crops harvested (excluding improved permanent pasture) has decreased, but the percentage fertilized has

increased. Cotton registered the greatest percentage decrease in harvested acreage (39 percent), while sorghums showed the largest gain in percentage of harvested acres fertilized (30 percent).

The decrease in harvested crop acreage was more than offset by a gain in the percentage of harvested acres fertilized. The net result was a rise in the quantity of fertilizer used. Fertilizer use on wheat increased 95,324 tons, or 266 percent.

The Oklahoma Experiment Station says that utilization of fertilizer has increased primarily because of higher applications per fertilized acre. This fact is especially true of nitrogen. Rates of nitrogen application on sorghum, hay and crop pasture, and "other crops" about doubled; and those on wheat, cotton, and improved permanent pasture approximately tripled. Application rates of phosphorus generally were slightly lower, but those of potash were a little higher.

Cool Heads!

"Cool-headed" cows give more milk during hot summer months than cows whose heads are not kept cool, according to a study by the U.S. Department of Agriculture. In USDA tests, cows whose heads and necks were held in enclosures cooled to 60° Fahrenheit gave from 15 to 20 percent more milk than those housed in an 85° Fahrenheit barn. The purpose of the study was to find ways to increase milk production at a time when the number of milk cows in the United States is decreasing and the population is growing.

The study of how various temperatures affect milk production in hot climates was conducted by G. LeRoy Hahn, Agricultural Engineer with the USDA's Agricultural Research Service, in cooperation with the University of Missouri. Previous research by the ARS has shown that a cool, pleasant environment boosts milk production. Most dairymen are hesitant to air-condition their barns, however, because of high costs of installation, operation, and maintenance.

Reduced cost is the principal advantage of cooling only the heads and necks of the cows

in order to increase milk production during hot weather. It is less expensive to cool a relatively small enclosure than to air-condition an entire barn. Moreover, cooling only the air within the enclosure presents no problems of dust, odor, or ammonia accumulation (problems which are associated with recirculated air) since ventilating fans can operate normally in the rest of the barn.

Grain Sorghum Yields Upped



Substantial increases in grain sorghum yields have resulted from narrow-row and double-row spacing in recent trials which were conducted by the Texas Agricultural Experiment Station on dryland, upland soils of the Grand Prairie near McGregor, Texas. There

were no important differences in yields as a result of planting rates, but there were highly significant differences due to row spacing, according to M. J. Norris, Agronomist with the Livestock and Forage Research Center, located near McGregor.

Seeding in narrow rows and double rows resulted in grain yield increases ranging from 10 to 30 percent. Row spacings of 10, 20, and 40 inches at planting rates of 4, 6, 8, and 10 pounds per acre were used with grain sorghum during a 3-year period. Other row spacing experiments were made using a uniform planting rate of 7 pounds per acre, including comparisons of single rows on lister beds 40 inches apart; double rows spaced 12 inches on lister beds spaced 40 inches apart; and grain sown on a flat seedbed with a grain drill spacing of 14 inches between drill openings.

Tear Down or Remodel?

Old buildings can pose a problem to the farmer who is planning enlarged or more modern facilities, points out W. S. Allen, Extension Agricultural Engineer at Texas A&M University. Quick decisions as to whether to use old buildings or to remove them could result in costly mistakes. In order to make maximum use of the farm and family resources, a long-time plan for the farm should be developed

before making any major changes in permanent facilities. With such a master plan, a set of facilities for the specific production enterprise can be developed.

Before deciding the fate of an old building, the structural condition of the building must be determined. The foundation, walls, roof, interior supports, and framing should be checked carefully. A major cash outlay for repairs may make it feasible to demolish the present structure.

Another determination is whether the arrangement and location of the old building lend themselves to be included in the new system at a remodeling cost less than that for a new building. The post spacing, ceiling height, and general arrangement should match those which would be planned for a new facility. The cost of remodeling, together with any addition, should be compared with the cost of a completely new building, says Mr. Allen.

The engineer concludes that some old buildings can be converted economically and integrated into a well-arranged new or enlarged production. He suggests a thorough cost and use study as the basis for making a sound decision on the use of an old building.

New Potato Variety Released

Alamo — a new high-yielding and widely adapted potato variety — has been released to seed producers, reports the U.S. Department of Agriculture. Developed cooperatively by the USDA's Agricultural Research Service and the Texas Agricultural Experiment Station, the new variety is especially adapted for heat-processed products such as canned soups, potato chips, and dehydrated foods. In addition, Alamo potatoes are good for general family consumption.

The new potato variety shows marked resistance to the common races of late blight, common scab, new necrosis following leaf roll infection, and mild mosaic. Alamo is mediumearly maturing.

Tests in 1965-66 compared Alamo with Irish Cobbler, Katahdin, and Kennebec potato varieties. Yields of Alamo, Katahdin, and Kennebec were about the same in Maine. Alamo was the highest producer in Texas and outproduced Irish Cobbler in both Maine and Texas.

A limited amount of Alamo potato seed is available to certified seed producers for increase in 1968. Requests for the seed should be addressed to David R. Wilson, Aroostook Farm, Maine Agricultural Experiment Station, Presque Isle, Maine 04769. Alamo seed will be generally available to growers for the 1969 planting. The USDA has no Alamo potato seed for distribution.

Brimming Rice Bowl

The 1967-68 world rice crop (excluding that of Communist Asia) is expected to surpass the previous record harvest of 1964-65 by 4 percent, reports the Foreign Agricultural Service. Growers throughout the world increased rice acreages, and record yields are expected as a result of generally favorable weather conditions and further use of improved cultivation methods.

World production of rough rice this season is forecast at a record 179 million tons, an increase of 10 percent from the reduced output of 1966-67. The previous peak harvest in 1964-65 amounted to 171.4 million tons, and production during the 5 years ended 1964-65 averaged 160.0 million tons annually. The largest gains in the current year's output are in India and Pakistan, where production of rice is up 26 percent and 10 percent, respectively.

Loose Stacking of Hay Stages a Comeback

The old practice of stacking loose hay in the field is staging a comeback, points out Dr. Neal Pratt, Extension Pasture Specialist at Texas A&M University. With modern equipment, stacking loose hay is a good way to reduce harvesting and storage costs.

There is very little investment in storage facilities when hay is stacked loosely since no barn is necessary. Poles, net wire, and frames are the only items needed to hold the stack together; consequently, hay can be harvested and stacked for about half the cost of baling and storing it in a barn.

In addition to the lower harvesting and storing costs, stacking loose hay in the field has several other attractive features. Since the level of plant nutrients is determined largely by the stage of development of the crop when it is cut, the quality of the hay in stacks is just as high as, or sometimes higher than, the quality of baled hay. Another strong point in favor of stacked hay is in feeding operations. Relatively little effort and labor are required in feeding hay from a loose stack. The only difficulty may be in regulating the amount consumed by individual animals; however, this point is questionable inasmuch as some producers prefer to feed hay free-choice.

Dr. Pratt says that there is less chance of spontaneous heating in loosely stacked hay than in baled hay because loose hay can be stacked with a higher moisture content. Moisture trapped in baled hay will turn the inside portion white and ruin the hay. In the final analysis, the decision as to which method to use may be based on several factors, including the acreage of forage involved, the type of livestock program, and the normal expectancy of inclement weather.

Cottonseed Flour

A process for making high-protein edible cottonseed flour has been developed by scientists with the U.S. Department of Agriculture. Besides making another edible protein source available domestically, the process could play a major role in increasing the amount of protein available in those underdeveloped countries that grow cotton.

Numerous experimental runs indicate that each 100 tons of cottonseed should yield about 36,000 pounds of high-quality edible flour containing 65 percent protein. The United States could produce approximately 2 million tons of such flour annually, and the remainder of the world could produce another 6 million tons. USDA officials say that the product could make a major contribution toward easing the problem of protein malnutrition in much of the world.