PRICE-MAKING FORCES IN TEXAS LAND MARKETS

Nonfarmer buyers are the dominant price-making forces in the Texas land market if land market processes in the State are similar to those in Robertson County. Frederic O. Sargent, Assistant Professor at the Texas Agricultural Experiment Station, reports that these purchasers are mainly interested in securing land for (1) future mineral production, (2) recreational use, and (3) long-term investment.

The nature of the demand for land in Texas has changed radically during the past decade. This change has been as pronounced in Robertson County (located in central east Texas) as in almost any county in the State. The general nature of the change has been the gradual evolution from a primarily rural economy to a “rururban” economy, which means that the previously distinct differences between the rural economy and the urban economy have mainly disappeared. We now have a large industrialized and urbanized economy in which rural areas are one of many integrated parts, rather than being considered a separate type of economic activity.

The principal effect of this development on the demand for land in Robertson County has been to change the motivations of the purchasers of the land. In turn, different forces are affecting the price of land. Prior to World War II, the primary incentive for purchasing and holding agricultural land in Robertson County was for use in agricultural production. Today, buying and holding land are for such motives as investment, speculation, recreation, rural residence, and anticipation of mineral discovery or production. A person desiring to buy land to use exclusively for agricultural production must compete with bidders having these nonfarming motives.

The activity of nonfarmer buyers in Robertson County has raised the price of timberlands to an amount greater than can be justified on the basis of capitalizing the value of annual agricultural production at the prevailing rate of interest. Now that many people are buying land for nonfarming purposes, the price of land is related to the returns in both money and satisfaction which will be received from its intended use. Many of these nonfarming incentives lead to a capitalized value of land that is far in excess of the value based on agricultural production alone. Therefore, the price of a large portion of the land is much higher than could be justified solely on the basis of farmer demand.

The agricultural ladder (the progression of a farmer from renter to part owner to owner to landlord) is not an important means of land-ownership. No significant number of young people are entering farming, and those who are becoming farmers are doing so through inheritance or marriage or by first acquiring capital in another line of work. Mr. Sargent says that the best opportunities for most of the Robertson County farm youth appear to be in attending schools and seeking jobs off the farm and outside the county.

A slow but steady process of consolidation of holdings is taking place. The size of farms is increasing, the number of farms is decreasing, and the number of out-of-county owners is
rising. The average size of farms in Robertson County rose 15 percent between 1950 and 1954, the number of farms declined 10 percent, and the number of operators residing on farms decreased 13 percent. Conversely, the number not residing on the farm operated advanced one-fifth during the period. The amount of land held by out-of-county owners increased from 38,365 acres in 1946 to 51,333 acres in 1956.

Just as the number of acres in cropland has decreased, the acreage in pasture has increased. In 1949, there were 283,919 acres in pastures. By 1954, this figure had advanced 15 percent.

The trend away from row crops toward livestock production has been under way for a long time. In 1929, there were 21 cotton gins within a 5-mile radius of Franklin, the county seat of Robertson County. There were no gins in the area in 1957. Consolidation is not going on evenly in all parts of the county; it is mainly evident in the upland area, which has been moved out of cotton and into pasture.

In the decade following World War II, there was a pronounced exodus of rural farm people from Robertson County. Most of the rural schools have been consolidated.

The full employment and general economic development in the State are the reasons behind these changes in Robertson County. As long as we continue to enjoy an expanding economy, these trends will continue to affect the land market in the same general directions, says Mr. Sargent.

**Blight-Resistant Acala Cotton**

Acala 1517BR-1 is an Acala 1517C-type cotton and is resistant to bacterial blight. The variety is recommended for the Trans-Pecos area of Texas, where blight is a problem in cotton production, according to the Texas Agricultural Experiment Station. Acala 1517BR-1 is slightly more susceptible to Verticillium wilt than is Acala 1517C and is not recommended for land known to be infected with the wilt organism.

Comparative yield tests show that, under blight-free and wilt-free conditions, Acala 1517BR-1 will yield as much as other adapted varieties in the Trans-Pecos area of Texas. Under blight conditions, Acala 1517BR-1 often will yield considerably more and produce cotton of higher quality than blight-susceptible varieties. In the latter case, the superiority of Acala 1517BR-1 depends on the degree of blight infestation.

Acala 1517BR-1 is similar in plant type and boll characteristics to Acala 1517C and is adapted to the same general area. The fiber is of good quality but is slightly shorter than that from Acala 1517C. The Acala 1517C-type cottons are not generally adapted to east and south Texas conditions.

An adequate supply of certified seed of Acala 1517BR-1 should be available through commercial channels for general planting in 1959.

**Disease-Resistant Tomato for South Texas**

Rio Grande is a new tomato variety that is highly resistant to fusarium wilt and to gray leaf spot. According to the Texas Agricultural Experiment Station, the variety is adapted to the Winter Garden-Laredo area and to the Lower Rio Grande Valley.

Plants of Rio Grande make a dense, compact-type growth, with ample foliage cover to protect the fruits. The fruits have green shoulders and are a large, deep globe in shape. They usually are smooth on both the stem and the blossom ends, are very firm, have a tough skin, and ripen evenly.

Rio Grande produces larger fruit than the Rutgers variety. In 5-season tests at Weslaco, 59.1 percent of the Rio Grande fruits graded 6 x 6 or larger; 48.3 percent of the Rutgers were in this size classification. Rio Grande matures 7 to 10 days earlier than Rutgers.

Tests indicate that the new tomato variety will greatly outyield Rutgers and will produce yields equal to those of Weshaven. A higher percentage of fruits of the Rio Grande variety will grade U. S. No. 1 than will those of Weshaven. The new tomato ships and stores well.
Chemical-Treated Seed
Good Insurance

Planting high-quality seed that has been treated for protection against soil-borne diseases is one of the best ways to get a crop off to a good start, points out Lee Coffey, Extension Agronomist with the Texas Agricultural Extension Service.

Farmers may choose from several approved chemicals for treating seed. The effectiveness of each is essentially the same when used according to instructions.

Mr. Coffey says that farmers do not have to wait until the last minute to treat planting seed, since storage is not a problem as long as the seed is stored under dry conditions and recommended dosages of the chemical are used. Early treatment helps to avoid a last-minute rush and gives the chemical extra time in which to work.

Treating helps to protect both the seed and the seedling from seed- and soil-borne diseases which may attack when soil conditions are not favorable for immediate germination. Therefore, the agronomist says that it is especially important to treat seed which is to be planted early.

Planting seed purchased through seed stores generally has already been treated; however, farmers should check the tag on the seed bag.

Pasture Grasses for Beef Cattle Production in East Texas

Two new broad-leaved pasture grasses, blue buffel and blue panic, are promising plants for beef cattle production in east Texas, reports Dr. C. L. Lundell, Director of the Texas Research Foundation at Renner. These grasses proved to be well adapted to the soils and climate of east Texas in 3-year tests at Henderson.

Blue buffel has a potential beef output of 395 pounds a year to the acre, and blue panic has shown a production potential of 329 pounds. The estimated beef yields of the grasses are calculated from the total amounts of digestible food elements they contain. These nutrients are proteins, nitrogen-free extracts, fibers, and fats. The blue buffel grass had 6,316 pounds of the food elements to the acre, and the blue panic, 5,258 pounds. The beef yield was estimated at 1 pound of animal gain to 16 pounds of the nutrients.

Forage yields for the blue buffel were 5.28 tons an acre, and those for blue panic were 4.48 tons. The yields were oven-dry weight from three harvests: May-June, July-August, and September-October.

The grasses in the Henderson tests were planted on March 31, 1956, after seedbeds had been fertilized with 100 pounds of phosphate per acre. Each spring, the grasses received 50 pounds of nitrogen to the acre.

Stop Chickens from Wasting Feed

In recent tests at Rutgers University, debeaked chickens wasted substantially less feed than birds with whole beaks, according to the United States Department of Agriculture. However, the New Jersey experiments show that the amount of feed wasted is determined largely by the height of the feeder and the depth of the feed in the hopper.

When the edge of the hopper was even with the height of the bird’s back and the hoppers were filled to only one-third of their depth, chickens that were not debeaked wasted 4 percent of the feed, while those that were debeaked wasted only 1 percent. When the hoppers were lowered a few inches and were filled to three-fourths of their depth, feed wastage rose to 20 percent for birds with whole beaks, but there was only a slight increase for the debeaked chickens.

Fertilizer-Water Depth Tests on Rice

Preliminary tests conducted at the Rice-Pasture Experiment Station at Beaumont, Texas, during 1956-57 showed significantly reduced rough rice yields of the Century Patna 231 variety from late tillering to maturity when deep water (10 to 12 inches) was used as compared with average depths (4 to 6 inches), according to the Texas Agricultural Experiment Station.
Continuous measurements at 2-inch depths with soil thermographs indicated that the daily soil temperature varied 2° to 4° more under the shallow water than it did under the deep water.

During 1956, there were no significant differences in the yields of rice as a result of depth of irrigation water. In 1957, however, depths influenced the yield responses to both nitrogen and phosphorus, with lower yields obtained under the deeper water. Nitrogen increased rice yields in both 1956 and 1957, but responses to phosphoric acid alone and to the combination of nitrogen and phosphoric acid were obtained only in the latter year.

Iowa State College recently reported that malathion is the most effective insecticide for controlling poultry lice and mites. For best results, the insecticide should be applied as a 1 percent spray to the inside surfaces of the poultry houses and very lightly on the birds themselves.

**Mesquite Can Be Controlled in Arizona**

Velvet mesquite—the grass-destroying weed tree—can be controlled in Arizona, say range conservationists with the United States Department of Agriculture. Control of mesquite is important because as few as 25 mature trees to the acre will reduce perennial grass yields by 50 percent.

Aerial spraying of 2,4,5-T in the spring, when the leaves are full-sized—but still succulent—and flower development is complete, will give sufficient mesquite kill to make grass reseeding profitable. Single trees or light stands of mesquite are controlled easily by spraying diesel oil around the base of the tree. This practice costs about 5 cents per tree and, therefore, is too expensive in dense stands.

In southern Arizona, mesquite must be treated for two consecutive years in order to achieve 50-percent kill. Aerial spraying the first year only defoliates the trees; they come back rapidly the following spring and must be retreatred. Plants remaining after the second treatment recover very slowly, and a third treatment is not necessary for about 5 years.

Fred H. Tschirley, Range Conservationist with the Agricultural Research Service of the USDA, reports that consecutive-year treatments of 2,4,5-T, applied at the rate of a half pound per acre in a mixture of 1 gallon of diesel oil and 4 gallons of water, result in 50-percent kill. He notes that native grasses bounce back rapidly when the mesquite is brought under control.

Reseeding without treating the mesquite results in very little improvement of the range. Lehmann love grass gives the best results when seeded on mesquite-treated range. This grass is drought-tolerant and is a prolific seeder which is easy to establish.

Mr. Tschirley points out that over 9 million acres of Arizona range have been invaded by mesquite. Honey mesquite and western honey mesquite have invaded correspondingly large acreages from Texas to California.

**Lipids Affect Quality of Baked Goods**

Mysterious fat-like substances in wheat flour, known as lipids, may hold the key to improvements in making high-quality baked goods, say scientists of the United States Department of Agriculture.

Lipids in wheat flour, like those in other foods, are soluble in fat solvents and insoluble in water and have a greasy feel. Although they comprise only about 1.5 percent of flour, they greatly affect its quality, baking behavior, and storage stability.

Continued research on lipids and other wheat flour constituents by the Western Utilization Research and Development Division of the USDA at Albany, California, is aimed at further clarification of how these substances may contribute to unexplained difficulties in commercial production of bread, cakes, cookies, and other baked goods.

The Nation’s farmer averages about a 15-cent return from every dollar that the housewife spends on cotton products, according to the United States Department of Agriculture.