

FARM AND RANCH BULLETIN

Vol. 20, No. 6

June 1965

CAPITAL QUANDARY

The capital required to finance a farm business has grown much faster than have farm earnings, and farmers in some areas are finding that they cannot save enough to have a debt-free farm in their lifetimes. In a study made by the Economic Research Service in cooperation with the Montana Agricultural Experiment Station, this condition was particularly applicable to dryland grain farmers. Even though this study was made in Montana, it has applicability to other areas and to farming operations in general.

In the early part of the 1910-60 period, most farmers started farming as tenants but were able to save the necessary sums for a down payment on a farm after a few years. This pattern of acquiring ownership of land appears to have shifted, and more renting is appearing as compared with buying in the past. The shift from buying to renting during the latter part of the period may be largely attributed to the increase in the cost of land and to the rise in amounts and prices of purchased inputs.

Although land values have mushroomed and may contribute heavily in total capital requirements for starting farmers, other factors have also been associated with the change. The forms of capital investments have reflected changes in horse and tractor power, upgrading living standards, and average size of farms.

To establish and examine the relationships between farm capital requirements and farm incomes, those responsible for the study used the information gained from Montana farmers

to design model farms. The researchers assumed that the producers owned equities of 20 percent of the value of their land and buildings and one-third the value of their machinery. The remaining capital was borrowed. Leases on rented land were computed on crop shares of one-fourth to the landlord and three-fourths to the tenant.

The real estate debt was to be amortized at 5.5 percent interest over 30 years. The machinery debt was to be retired in 5 years, amortized at 8 percent. Interest on owned assets was figured at 5.5 percent. Living expenses were set at a minimum of \$2,400 a year.

Under the conditions listed, about the only way a farmer could get started would be as a full tenant. To be able to save anything above expenses required that the tenant have about 1,600 acres. When cropland holdings were pushed up to the 2,500-acre level, both part owners and tenants would have a chance to save something for future expansion. Under the assumptions given, a full owner had very little chance to save capital ahead, regardless of the size of farm. The magnitude of the full owner dilemma is illustrated by the amount of funds needed to get through the first year. A total of \$49,000 was required for all production and living expenses on an operation with 1,600 acres of cropland. The full tenant would require about \$17,000 for the first year on the same size farm.

With the need for capital as it exists in agriculture, farmers will have to depend more

upon capital from the nonfarm sector. Although this practice is contrary to tradition for farm people, it is far from new to other businessmen. The process of acquiring full ownership of assets is often expected to take more than the life-span of an owner or corporate officer.

Insect-Resistant Cotton

Two characteristics of certain wild cottons can be bred into commercial cotton varieties to give them resistance to at least five important insect pests, reports the U. S. Department of Agriculture. The wild cotton plants are nectariless (having no nectar-producing glands except in the flower) and glabrous (having no epidermal hair). These plants are resistant to the cotton bollworm, tobacco budworm, pink bollworm, cotton leafworm, and cabbage looper. No commercial cotton varieties show any appreciable resistance to these major pests.

Each of the two characteristics of the wild cottons gives resistance to insects in a different manner. Eliminating nectaries cuts off an important source of food for moths. Upland cotton, for example, has one to three nectaries on the lower side of each leaf, as well as others on the fruiting forms. The glabrous trait offers insects a less desirable, smooth surface on which to lay their eggs.

Agricultural Research Service scientists say that the greatest resistance seems to be against two of the most serious cotton pests — the cotton bollworm and the tobacco budworm. These insects deposited 80 percent fewer eggs on plants that were both hairless and nectariless than on a strain that is comparable with commercial varieties.

Moreover, bolls on plants containing the nectariless trait showed significantly fewer mines (tunnels) caused by larvae of the pink bollworm, as well as a significant reduction in the number of larvae of the cotton leafworm and the cotton-damaging cabbage looper. According to the USDA, the absence of epidermal hairs enhances the grade of mechanically harvested cotton by reducing the amount of leaf trash.

\$5,000 Reward!

The Texas Forestry Association has increased its reward from \$500 to \$5,000 for information resulting in the arrest and conviction of a person or persons guilty of committing a felony by willfully setting a forest fire in the east Texas piney woods. The reward has been increased because of numerous incendiary fires that have been occurring in southeast Texas.

Any person, including law enforcement officers, is eligible to claim the reward, according to the Texas Forest Service, a part of The Texas A&M University System, College Station, Texas.

New Cotton Variety for the West

A new variety of upland cotton that has a wide range of adaptability in the West is being distributed to seed producers, reports the U. S. Department of Agriculture. The variety, called Hopicala, was developed cooperatively by the USDA's Agricultural Research Service and the Arizona and New Mexico Agricultural Experiment Stations. A limited quantity of breeder seed is available to bona fide producers from the Department of Plant Breeding at the University of Arizona in Tucson.

Hopicala cotton produced excellent yields at a wide range of locations in New Mexico and Arizona, as well as in western regional tests. The variety has excellent fiber qualities and a moderate degree of tolerance to verticillium wilt.

Hopicala produces sturdy, upright, close-fruited, and rather leafy plants that mature relatively early. The bolls are large, and the lint percentage is good. The variety is well adapted to harvesting with a spindle-type picker.

Sausage Casing from Surplus Hides

The large numbers of beef cattle being slaughtered in this country have created a problem of what to do with the hides. Oklahoma State University reports that researchers are

considering the possibility that a meat-hungry population might eat these hides.

Specialists with the U. S. Department of Agriculture's Economic Research Service are considering the use of fresh cattle hides as a casing for such processed meats as pork sausage. The more suitable portions of the hides would be used for the casings, and the remaining parts would be tanned for leather.

Production of leather shoes has increased less than has the population, but the percentage of shoes made with materials other than leather has been rising. According to Oklahoma State University, it is becoming more difficult to market the \$365 million annual hide crop through the shoemaker.

Farm Buildings Should Be Functional

Farming methods are changing rapidly; consequently, buildings should be designed in such a way that changes can be made in them at a minimum cost. One-story, clear-span buildings offer this possibility, states W. S. Allen, Extension Agricultural Engineer with Texas A&M University.

Farm buildings are important production tools on the modern farm. They must be justified for whatever purpose they are used, and the benefits derived from them must assist in maintaining or increasing the net farm returns, says the engineer.

The first requirement is that each building be functional. The building must be planned and constructed for a specific purpose, such as for the drying, storing, and processing of grains for feed.

The second requirement is that the building be arranged so as to permit efficient use of labor and equipment in performing the specific function. This factor is very important, says Mr. Allen, because of labor costs, the scarcity of satisfactory labor, and the trend toward increased mechanization.

The third requirement is long service with minimum maintenance costs. The use of modern building methods reduces the time needed for construction, as well as the cost. A careful selection of building materials and their proper

use will result in reasonable and economic service from the structure.

Each new or remodeled building should fit into the long-range plan of the farm operation. Short-time planning often proves to be costly and time-consuming. Each unit should be coordinated with other facilities on the farm in order to obtain maximum operating efficiency for the entire farm on an annual basis, according to the specialist.

Leaflets Three, Let It Be!



Spring brings poison ivy problems to many people, says Garlyn O. Hoffman, Extension Range Specialist with Texas A&M University. Although some persons are more susceptible than others, no one is ever fully immune to poison ivy. The first symptoms of itching and burning may develop within a few hours after exposure to the plant, or they may not become apparent for 5 days or longer.

Poison ivy is widespread throughout Texas, especially along streams and in shady places. The greatest danger from the plant is in the spring and summer.

All parts of the poison ivy plant are toxic, particularly the sap. A small amount of the toxic agent can cause skin inflammation. The toxin is easily transferred from one object to another, as well as by pets that run through poison ivy plants. Moreover, toxin is carried by smoke from burning the plants.

Poison ivy is a perennial, native plant that grows during the warm season. Three varieties of poison ivy grow in Texas. The most widespread type is the common poison ivy, which has glossy green leaves with smooth margins. The other varieties have lobed or toothed leaf margins that resemble oak leaves, thus the name "poison oak." Poison ivy can be a vine, shrub, or small tree. The leaves of poison ivy are always divided into three leaflets; consequently, one should remember the old saying, "Leaflets three, let it be."

Mr. Hoffman offers the following suggestions for preventing poisoning from the plants.

1. Avoid contact with poison ivy plants.
2. Keep pets from running through poison ivy plants. The toxin transferred to their feet and fur can remain on the pets for several days and be transferred to human beings.
3. Do not burn poison ivy plants.
4. Wash contaminated clothing thoroughly and separately before wearing.
5. Wash the contaminated part of the body thoroughly with soap and water after contact is made with poison ivy.
6. Consult a physician for treatment of poison ivy irritations rather than use home-made remedies.

Although poison ivy can be controlled by hand chopping, the use of a herbicide applied as a spray solution is more effective. Herbicides that obtain the best control of poison ivy are ammonium sulfamate (ammate), amino triazole, 2,4,5-T, silvex, and 2,4-D. All of these herbicides are absorbed through the leaves and stems of the plants. Herbicides should be applied according to the directions on the container labels.

Rio Makes Debut

Rio, a new sweet sorghum variety, has made its debut this spring as a potential supplementary crop for southern states, according to Fred Miller, Research Associate with Texas A&M University's Soil and Crop Sciences Department. The variety is disease-resistant, high-yielding, and high in sugar content.

The high sucrose, or sugar, content of Rio suggests that it could become a sugar crop in some areas of Texas, such as the Rio Grande Valley. The variety also is promising as a high-yielding silage crop.

Rio is highly resistant to leaf anthracnose and rust — two major diseases of sweet sorghum. It has also shown good resistance to damage from cotton insecticides currently used in the South.

Rio is equal or superior to Tracy, Brawley, and Rex sorghum varieties in stalk production per acre. Under ideal growing conditions, however, it reaches a height of 1 to 2 feet taller than Tracy and is subject to lodging. The new sorghum matures in 105 to 130 days and yields as much seed per acre as does Tracy.

Teen-agers — Good Farm Bookkeepers



Teen-agers often make the best bookkeepers on farms and ranches, states James Murphrey, Farm Management Specialist with the Texas Agricultural Extension Service. Since many farmers prefer to work on production problems rather than on records, Mr. Murphrey suggests that wives, teen-age children, or bookkeeping services may maintain the farm records.

Teen-agers can do an excellent job of keeping farm records, and the experience will be valuable throughout their lives. Maintenance of farm records would enable the youngsters to understand the economics of modern agricultural production and thus help them to decide whether they want to be farmers or ranchers when they become adults.

Mr. Murphrey says that it is almost impossible to operate a successful farm or ranch without satisfactory records. He states that teen-agers generally are good at arithmetic and often learn to be better bookkeepers than their parents.

Meat consumption per capita continues to rise, reports Texas A&M University. Americans ate 174 pounds of red meat per person in 1964, compared with only 149 pounds in 1947-49. Texas beef producers have a big stake in the gain, since beef registered the largest increase — from 66 pounds to 100 pounds per capita. During the comparison periods, U. S. poultry consumption rose from 22 pounds per capita to 38 pounds.