UNIVERSITY OF FLORIDA
EXTENSION
Institute of Food and Agricultural Sciences

Utilizing Crop Insurance to Reduce Production Risk[1]

Robert Ibarra and Tim Hewitt[2]

Introduction

Managing risk continues to be a key to profitability for most agricultural commodites as prices and yields fluctuate due to market forces and weather variations. Congress has been sending messages to agricultural producers that farm programs will continue to be cut, including disaster assistance. Public policy emphasis has been to move agriculture to a more market economy and to have producers assume more of the income risks. Producers must improve price and yield risk management and look for ways to transfer some of the production and price risk.

Some production and marketing practices for managing risks include:

- enterprise diversification (for citrus by planting more than one variety or type)
- forward pricing
- spreading sales
- obtaining and utilizing market information
- off-farm employment activities
- crop insurance
- new technologies (mechanical harvesting)

Crop Insurance

Crop insurance is both an important component of risk management activities and an inexpensive way to reduce risk. Typical sources of risk for citrus producers include unstable prices, insect and disease damage, adverse weather, costs of inputs, and foreign competition.

Crop insurance is one tool that citrus producers can use to help manage production and price risk. Crop insurance is a risk management policy that is subsidized by the government whereby losses are paid based on a percentage of the loss, depending on the levels of coverage purchased. Crop insurance is available for many crops grown in Florida. Availability of insurance for these crops will vary by county and by the commodity grown. The federal government (USDA) is attempting to make some type of insurance available for most of the crops grown in the country.

1. This is EDIS document FE 198, one of nine papers in the 1999 Citrus Risk Management Series, a publication of the Department of Food and Resource Economics Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Science, University of Florida, Gainesville, FL. Published October 2000. Please visit the EDIS website at http://edis.ifas.ufl.edu
2. Robert Ibarra, risk management specialist, Valdosta Regional Risk Management Office, Valdosta, GA; and Tim Hewitt, professor, Department of Food and Resource Economics, University of Florida, North Florida Research and Education Center, Marianna, FL.

Most crop insurance policies provide protection for a group of perils commonly called "acts of God" that are usually related to weather conditions or some type of pest problem. Coverage against these perils is provided as a unit-production guarantee. The unit-production guarantee is converted to dollars of protection by a price election selected by the insured when the policy is purchased. The price election is not a guarantee of market prices. In addition to regular multiple peril crop insurance, producers may purchase two basic classes of supplemental policies—one that provides coverage for production, while the other provides coverage for prices.

Citrus Crop Insurance

In Florida, citrus production is very important to the overall economy of the state. Citrus is a high-value crop with relatively high production costs. Florida produces over 55 commodities, with receipts of over one million dollars which includes eight or nine citrus type commodities. A breakdown of Florida Agriculture Receipts for 1999 as shown in Figure 1 has citrus accounting for 27 percent of the sales, with $1.92 billion of receipts.

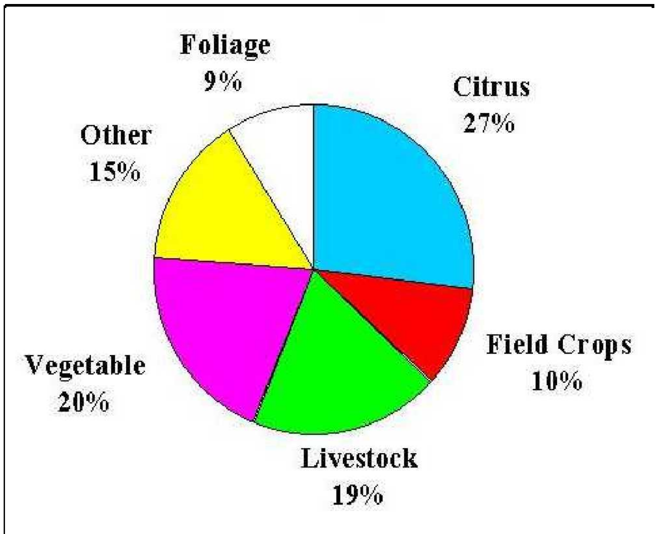

Figure 1. 1999 Florida Agriculture Receipts

Crop losses are attributed to diverse weather factors in the United States. The breakdown shown in Figure 2 illustrates that drought is the most prevalent weather problem in the nation. In Florida, freeze damage is the leading weather problem that causes crop loss, with drought being second.

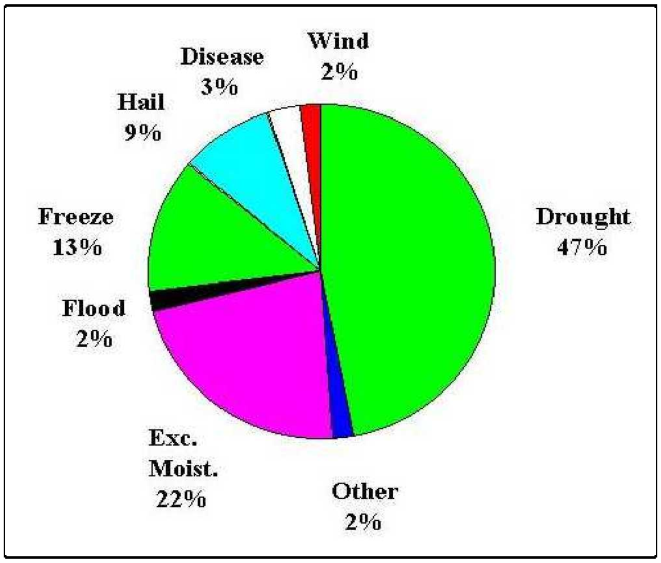

Figure 2. Causes of Crop Loss in the United States

There are two types of crop insurance for citrus in Florida: tree and fruit. The fruit tree insurance program began as a pilot program in five counties of Florida, which has now been extended to 29 counties in the state. An overview of tree insurance includes:

- **Crops Insured:** Selected citrus fruit trees, including grapefruit, citrus, temple oranges, and tangerines.
- **Causes of Loss:** Freeze, wind, excess moisture, and infection by citrus canker.
- **Acreage Report:** Producers must report to their insurance company all citrus acreage in the county in which a share is owned, the share percentage owned at the time insurance attaches, and the crop type.
- **Coverage Level Choices:**
  - Catastrophic coverage: 50%
  - Limited coverage: 50%, 55%, 60%
  - Additional Coverage: 65%, 70%, 75%
- **Insurance Period:** Insurance attaches for each crop year on November 20 for carryover insureds, and 30 days after the insurance applications date for new insureds.

An overview of Florida Citrus Fruit insurance includes:

- **Counties:** 29 counties, with Marion County being the northernmost edge.
- **Crop Insured:** 7 types of citrus fruit, ranging from early and mid-season oranges to fresh grapefruit and fresh late oranges.
- **Causes of Loss:** fire, freeze, hail, hurricane, and tornado.
- **Acreage Report:** Producers must report to their insurance company all citrus acreage in the county in which a share is owned, the share percentage owned at the time insurance attaches, and the crop type.
- **Coverage Level Choices:**
    - Catastrophic coverage: 50%
    - Limits coverage: 50%, 55%, 60%
    - Additional coverage: 65%, 70%, 75%, 80%, 85%
- **Insurance Period:** Insurance attaches for each crop year on May 1 and ends either January 31, April 30, or June 30, depending on fruit type.

The cost of crop insurance by type varies depending on coverage levels. Tree insurance is based on tree cost and can be as low as $60 per 1,000 trees. Citrus fruit insurance is based on yield level coverage per acre and may be as low as $6 per acre.

Conclusion

An important part of production planning is to decide on risk management strategies. Purchasing crop insurance may be a viable means of reducing the risks inherent in citrus production. The crop insurance decision is based on the financial situation of the producers, individuals' risk aversion, types of coverage available, potential for problems, and costs for coverage. A prudent farm manager should carefully evaluate the crop insurance decision as another risk management tool and decide if insuring the citrus fruit and/or tree is economically viable.