

## Publications

### TR- 58

#### Value of Irrigation Water with Alternative Input Prices, Product Prices and Yield Levels: Texas High Plains and Rio Grande Valley

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- [Full Text](#)

Agriculture is a major income generating sector of the Texas economy. Irrigated agriculture is an important part of Texas agriculture and an "adequate" water supply is important in maintaining a viable agriculture. Irrigation water is important both as a means of increasing the overall production of agricultural commodities and to stabilize farm income from commodities because of the high (year to year) variability of rainfall in most agricultural areas of Texas.

Current interest in the value of irrigation water in agricultural production stems in part from rapid change in prices paid for farm inputs and prices received for farm products. The past two years have been a period of abrupt and large increases in prices. Prices of some farm products have risen to record levels; because of the energy crisis and the rapid rate of inflation, prices of fertilizer and fuel have at least doubled, and the price of

other farm inputs have risen substantially. These price changes, in absolute and relative terms, make past studies of the value of irrigation water no longer meaningful or applicable. This study was undertaken to determine the value of irrigation water under 1974 price levels and relationships, and for prices that might be reasonably expected in the future

In this report estimates are presented of the value of irrigation water at irrigation levels typically used on major crops (1% or more of cropped land area based on 1969 TWDB inventory) produced in the High Plains (Northern and Southern) and Lower Rio Grande Valley Regions of Texas. Estimates of the value of irrigation water under alternative product prices, production costs, and yield levels are presented. This allows the reader to observe the "sensitivity" of the "ability-to-pay" for irrigation water to changing economic conditions (i.e., changing input and output prices).

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