

crop was tabulated as "nonirrigated" if none of the reported acres harvested for the crop was reported irrigated. The "partly irrigated" category included the crop acreage from those farms where only part of acres harvested of the specified crop was reported irrigated. The average yield per acre was computed for the acres harvested of each specified crop for each category. In most cases, particularly in the western part of the United States, the differences in average yields on wholly irrigated and nonirrigated acreage were striking.

To provide an overall view of the effect of irrigation, data are presented in table 5 concerning acreage yield indexes for the 17 Western States and Louisiana and for the 30 Eastern States, Alaska, and Hawaii. In computing the indexes, the U.S. average yield per acre for each specified crop was used as the base figure and set equal to 100. The index of average yields was then computed for the average yield of that portion of the crops that was wholly irrigated and the portion that was not irrigated for each of the two areas.

It is obvious that irrigation has a much greater effect on average production in the West than in the East. However, the percentage indexes vary considerably by crop and area.

Another measure of the effect of irrigation is the value of products produced on irrigated farms versus nonirrigated farms. In 1974, the total market value of products sold from all farms amounted to \$81.5 billion. Farms with sales of \$2,500 and over accounted for \$80.6 billion, or 99.0 percent of the total value of agricultural products. Table 19 provides detailed information for value of products sold from nonirrigated farms and from irrigated farms as well as selected expenditures for the same groups. The data in table 6 present the highlights.

Table 5. Index of Average Yield for Specified Harvested Crops From Wholly Irrigated Land: 1974

(U.S. average yield - 100)

Farms With Sales of \$2,500 and Over

| | U.S. average yield per acre | | Index for 17 Western States and Louisiana | | Index for 30 Eastern States, Alaska, and Hawaii | |
|--|-----------------------------|-------|---|--------------------|---|--------------------|
| | Average yield | Index | Crop wholly irrigated | Crop non-irrigated | Crop wholly irrigated | Crop non-irrigated |
| Alfalfa hay.....tons.. | 2.6 | 100 | 154 | 67 | 115 | 105 |
| Corn for grain.....bushels.. | 71.7 | 100 | 143 | 79 | 124 | 98 |
| Corn for silage.....tons, green.. | 10.7 | 100 | 153 | 52 | 153 | 108 |
| Sorghum for grain.....bushels.. | 43.0 | 100 | 164 | 85 | 149 | 109 |
| Wheat.....bushels.. | 26.9 | 100 | 170 | 91 | 104 | 123 |
| Barley.....bushels.. | 37.5 | 100 | 164 | 80 | 150 | 115 |
| Oats.....bushels.. | 47.2 | 100 | 118 | 77 | 123 | 116 |
| Soybeans for beans.....bushels.. | 23.9 | 100 | 123 | 98 | 112 | 100 |
| Dry field and seed beans.....100-lb bags.. | 13.6 | 100 | 136 | 44 | 95 | 92 |
| Alfalfa seed.....pounds.. | 240 | 100 | 183 | 33 | 8 | 22 |
| Cotton.....bales.. | .9 | 100 | 156 | 61 | 117 | 95 |
| Tobacco.....pounds.. | 1986 | 100 | - | 42 | 106 | 100 |
| Irish potatoes.....hundredweight.. | 236.1 | 100 | 118 | 66 | 103 | 84 |
| Sugar beets for sugar.....tons.. | 18.5 | 100 | 116 | 62 | 89 | 73 |
| Vegetables, sweet corn, or melons for sale.....dollars.. | 762 | 100 | 156 | 49 | 136 | 47 |
| Land in orchards.....dollars.. | 676 | 100 | 122 | 57 | 78 | 84 |

Table 6. Percent of Selected Items on Nonirrigated and Irrigated Farms: 1974

Farms With Sales of \$2,500 and Over

| | Farms | Acres (1,000) | | Total production expenses (\$1,000) | Total value of agricultural products sold (\$1,000) |
|---|-----------|------------------------------|----------------|-------------------------------------|---|
| | | All land, excluding cropland | Total cropland | | |
| United States, total..... | 1,695,047 | 905,640 | 412,998 | 59,855,727 | 80,598,305 |
| Nonirrigated farms..... | 1,492,914 | 702,914 | 339,018 | 43,200,876 | 58,680,299 |
| Percent of total..... | 88.1 | 77.6 | 82.1 | 72.2 | 72.8 |
| Irrigated farms..... | 202,133 | 202,726 | 73,980 | 16,654,851 | 21,918,006 |
| Percent of total..... | 11.9 | 22.4 | 17.9 | 27.8 | 27.2 |
| 17 Western States and Louisiana, total..... | 563,385 | 605,563 | 212,270 | 28,064,847 | 35,887,169 |
| Percent of United States..... | 33.2 | 66.9 | 43.1 | 46.9 | 44.5 |
| Nonirrigated farms..... | 396,498 | 420,460 | 148,531 | 14,463,000 | 18,306,804 |
| Percent of the 18 States..... | 70.4 | 69.4 | 70.0 | 51.5 | 51.0 |
| Irrigated farms..... | 166,887 | 185,103 | 63,739 | 13,601,847 | 17,580,365 |
| Percent of the 18 States..... | 29.6 | 30.6 | 30.0 | 48.5 | 49.0 |
| 30 Eastern States, Alaska, and Hawaii, total..... | 1,131,662 | 300,077 | 200,728 | 31,790,881 | 44,711,135 |
| Percent of United States..... | 66.8 | 33.1 | 40.6 | 53.1 | 55.5 |
| Nonirrigated farms..... | 1,096,416 | 282,454 | 190,487 | 28,737,877 | 40,373,494 |
| Percent of the 32 States..... | 96.9 | 94.1 | 94.9 | 90.4 | 90.3 |
| Irrigated farms..... | 35,246 | 17,623 | 10,241 | 3,053,004 | 4,337,641 |
| Percent of the 32 States..... | 3.1 | 5.9 | 5.1 | 9.6 | 9.7 |

Of the \$80.6 billion of agricultural products sold from farms with sales of \$2,500 and over, irrigated farms accounted for \$21.9 billion, or 27.2 percent. This \$21.9 billion worth of products results from only 11.9 percent of the farms, 17.9 percent of the cropland, and 22.4 percent of land in farms..

These figures also vary considerably between East and West. The 17 Western

States and Louisiana account for 44.5 percent of the \$80.6 billion worth of agricultural products sold, while the other States account for 55.5 percent. The West accounted for \$35.9 billion worth of agricultural products. Of this amount, 49.0 percent came from irrigated farms. In the East, irrigated farms accounted for only 9.6 percent of the \$44.7 billion of agricultural products sold.