SHORT-RUN COST AND INCOME EFFECTS OF CHANGES IN LIVESTOCK PRICES, RANGE FORAGE SUPPLIES, AND FEDERAL RANGE GRAZING FEES AND PERMITS

Changes in Livestock Prices

Average prices received for cattle in 1953-60, which were slightly higher than the projected prices, were used to show the effect of a price increase on net ranch income. The average price received for cattle was 19.10 cents per pound using projected prices while the 1953-60 average price was 19.80 cents per pound (table 10). Although this price increase was very slight, it increased the average gross income of the 14 representative ranches by 3.69 percent. Consequently, average net ranch income at 1953-60 average prices was \$2,563 as compared with \$2,105 at the projected prices, an average increase of approximately 22 percent.

The break-even points between costs and returns at projected prices and 1953-60 average prices are shown in figure 5. The break-even points occur at a ranch size of about 110 animal units for the projected price level and about 100 animal units for the 1953-60 average price level.

Changes in Grazing Fees

Grazing fees are increased from 1960 average fees of 20 cents (Bureau of Land Management) and 60 cents (Forest Service) by four 20-cent increments per animal unit month to determine the cost effect on net ranch income.5/ The fee increases are applied simultaneously against 1960 fee levels of both Federal agencies. Each 20-cent grazing fee increase raises average cash costs by \$325 to a total cash cost increase averaging \$1,300 (table 11). The increases in cash costs are directly related to the number of animal unit months permitted. Besides reducing the amount of net ranch income, the first 20-cent increase in grazing fees changed the net ranch income of an additional ranch from positive to negative (table 12).

Changes in Range Forage Supplies

Five of the ranches, each representing a typical ranching situation in either the Southern Intermountain Area or the Southern Desert Ranching Area, were selected to evaluate the cost and income effect of an increase and a decrease in range forage. The forage available to these ranches was assumed to vary from normal by 20 percent. Livestock inventory numbers and supplemental feeding practices were changed as required with the reduction and the increase in forage, and livestock prices were held constant. The cost and income evaluations of the effect on net ranch income of a 20-percent increase or decrease in forage were made under two conditions with regard to the Federal range grazing permit. The grazing permit was first held constant and then it was increased or decreased as range forage was permitted to increase or decrease.

5/ The highest fee level evaluated was \$1.00 per animal unit month for Bureau of Land Management grazing and \$1.40 per animal unit month for Forest Service grazing.