and 1953 only, yet the mean yield was relatively high with 365 bushels per acre. Since the whole plot area was fall irrigated, it is apparent that the available moisture in the root zones was at a sufficiently high level during the following crop season to maintain reasonable plant growth.

Precipitation was also a factor, since in 2 of the 6 years this was above normal. Although irrigation during the growing season did result in increased yields, the factor of stored soil moisture makes it difficult to appraise the true value of seasonal irrigation on potato production.

Table 3. THE EFFECT OF MOISTURE LEVELS ON POTATO PRODUCTION AT WILLISTON IRRIGATION STATION (AVERAGE OF 6 YEARS).

|                       | ou Mean Annual See Precipitation | Drecipitation<br>During Grow- | Urigation<br>se Water Applied | Urrigation<br>and Precip-<br>itation | Total<br>yield* | U. S. No. 1<br>yield |
|-----------------------|----------------------------------|-------------------------------|-------------------------------|--------------------------------------|-----------------|----------------------|
| Low moisture level    | 14.2                             | 9.3                           | .8                            | 10.1                                 | 365             | 295                  |
| Medium moisture level | 14.2                             | 9.3                           | 4.4                           | 13.7                                 | 403             | 332                  |
| High moisture level   | 149                              | 9.3                           | 9.2                           | 18.5                                 | 457             | 378                  |

<sup>\*</sup>Yield in bushels per acre.

## MARKET PRICE OF SHEEP AND LAMBS

