

the probability of a 40-ton per acre production rate was calculated to be .31.

### *Interest Rate and Capital Usage*

The interest rate on capital used throughout this analysis was assumed to be 8 percent. In each case where interest was applied to capital, it was assumed that the capital was used at a constant rate over a period of one year. Thus, if \$100 of capital is used at a constant rate over a full year, the average investment in capital is \$50. Applying an interest rate of 8 percent to this amount ( $.08 \times \$50$ ) yields an annual interest rate charge of \$4.

### *Revenues*

Revenues were calculated on the basis of the grower being an independent producer selling to an independent processor who produces sugarcane or else that the sugarcane produced was purchased by a cooperative processor from a nonmember [5, p. 3]. It was also assumed that all sugarcane was produced within 14.9 miles of the processing mill, thus eliminating any transportation costs to the growers [5, p. 2-3]. Payments for hundredweights of sugar produced are described in *The United States Sugar Program* [6, p. 67].

These assumptions about returns to growers do not reflect any gain or loss in revenue that may accrue to a grower who is a member of a processing cooperative. Such a grower member is also a part owner — he has invested in plant and equipment — of the cooperative and, in essence, is a sugarcane processor as well as a producer. Therefore, the revenue he receives depends on the performance not only of his sugarcane production, but also of the processing cooperative.

Since this analysis is concerned with costs and returns for sugarcane production, the assumptions stated were made and followed.

## **GENERATION OF DATA**

### *Sources of Data*

Generally speaking, the numerical quantities presented in the tables included in this report represent estimates received from individuals with knowledge of sugarcane production. For example, information related to kinds and sizes of equipment requirements, different operations, and the rates of equipment usage and labor per acre was obtained from growers.<sup>3</sup>

Moreover, the costs of materials and equipment (Table 2) reflect values charged by suppliers in the area. However, the prices presented generally reflect suggested retail prices and are not necessarily indicative of those a particular grower might pay. For example, the larger quantity an individual purchases, the more likely he is able to

---

<sup>3</sup>See Table 3.