

shopkeepers rather than from a government loan agency. By forcing down interest rates on loans the government credit program could appreciably benefit farmers without putting the burden on itself of being the sole supplier of rural credit. The institutional format of the credit program could take several forms. Crop mortgaging loans, which are presently offered in a Sudan Agricultural Bank program to assist small farmers (See Appendix H), are one possibility. A pawn shop to give loans in exchange for valuables left at the shop is another.

Increasing the disposable income of farmers by making loans available at intervals during the cropping season would have the effect of allowing farmers to hire more labor in order to increase their yields either by intensifying operations such as weeding or by expanding the area under cultivation. But such a result has further consequences. First, increasing crop yields by intensifying the labor input will cause soil nutrients to be used up at a faster rate. Secondly, the expansion of area under cultivation will leave more of the soil denuded of its natural vegetative cover and will make it more vulnerable to wind erosion. Both these factors will be noticed in a faster decline in soil fertility. Therefore, a farm input-loan program should be coordinated with a soil management program advocating intercropping, regular fallowing, the use of shelter belts and possibly fertilizers (although it is a moot issue whether fertilizer use in this area of low, erratic rainfall can be economical for the near future).

Moreover, more than just environmental constraints are activated by the establishment of a farming inputs credit program. It is not clear, for example, that increased crop yields will lead to farmers' earning higher real incomes. Since agricultural prices in the el-Obeid area are related to the prices at el-Obeid Crop Market and these reflect national-level and international market prices, increased yields could in any year bring disappointing results at the market. Exactly this has happened to the groundnut crop this year. Thus, a credit program also may have to be coupled with the imposition of an effective price support program by the Sudan Government and with long-range market forecasting in order to advise farmers of the changing demand for local crops. Beyond this, a program to expand the market for local crops should be considered.

B. Procedures for Auctioning Crops

Minor irregularities in the procedures for auctioning crops have a small effect on reducing farmers' earnings. These are:

- (a) The assignment of farmers' crops to lots is not randomized. The problem is that the first lot bid on usually receives the lowest price of the day. The composition of this first lot is usually made up of the crops which were delivered earliest to the market. Thus, the farmers who bring their crops early