C. Chemical inputs
1. At present, herbicides and fertilizers do not appear to be economic for small farmers in el-Obeid area.
2. Continue and expand the program of distributing seed dressing, perhaps using local merchants.
3. Look for a substitute for DDT which is used excessively to prevent insect attack on food crops.
4. Discourage the practice of using salt on millet and sorghum threshing floors. An alternative should be introduced to protect these grains from termites.

D. Availability of drinking water
1. The scarcity of drinking water is an important constraint on crop production since farmers are reluctant to cultivate in areas where there is not a reliable water supply. Care must be taken, however, to insure that increased access to water - through the excavation of reservoirs or the sinking of wells - may have dire consequences if it leads to growth of herd populations in excess of available pasture. Careful regional planning is required to ensure the optimal distribution of watering points.

III. Other constraints

A. Credit
1. The Sudan Agricultural Bank in its program to make cropping input loans to small, traditional farmers should consider raising the interest rate upward from the present 14% to a level in excess of the annual rate of inflation plus the amount needed to reimburse the cost of administering the program. An alternative to this program might be to make loans to farmers on the basis of valuables left as collateral.

B. Procedures for auctioning crops
1. Randomize the assignment of farmer's crops to lots.
2. Randomize the order in which crop buyers may bid at the auction.

C. Pricing policy with respect to gum arabic
1. The difference between the farm gate price for gum arabic and the international price is greater than 100%. The Government of Sudan must find the means to increase the farmers' share of the income from gum marketing. Otherwise, the area under Acacia senegal will continue to decrease.
2. A program is needed to teach farmers to better propagate and care for the trees.

D. Limited knowledge of farmers
1. A low-cost method for disseminating farming and marketing information to illiterate farmers. Radio programming would seem to be an optimum means of accomplishing this since radios are common in the villages.

E. Transport and storage
1. In the el-Obeid area these operations do not seem to pose major constraints for village farmers.