

are penalized. This problem could easily be remedied by randomizing the order in which the lots are auctioned. Lots could still be filled up one at a time as farmers arrive with their crops.

- (b) The order in which merchants are allowed to bid is determined haphazardly and may permit merchants to make agreements before the auction starts. A random ordering of merchants before bidding would make collusion more difficult.

### C. Pricing Policy with Respect to Gum Arabic

It is often observed that the fertility of the qoz soils would be improved by a regular rotation between crops and gum tree fallowing. The probability is very great that the single most important constraint that obstructs this proposal is that the farm gate price of gum arabic is kept artificially low in order to give the government a bigger tax bite. In fact, the difference in the price which the Gum Arabic Company pays for gum arabic that is delivered to Port Sudan and the international buying price is greater than 100%.

#### Compensating Strategies

1. Farmers find that it is more profitable to plant cash crops and millet than to tend Acacia senegal trees and collect gum arabic.
2. Oftentimes farmers find the gains from harvesting hashaab wood for construction, fuel and charcoal manufacture are higher than the gains from gum collection. Therefore, gum trees are being felled before they reach the age of peak gum output.

#### Recommendations

The Gum Arabic Company and the Sudan Government must find the means to increase the producer's share of the income from gum marketing. At the same time, a program is needed to teach farmers to propagate and care for the trees.

### D. Limited Knowledge

One of the main consequences of the poor state of communications in the region is that farmers are unable to obtain accurate and current knowledge about a host of farming and marketing activities ranging from the use of seed dressings to the current prices at el-Obeid Crop Market. Because of it farmers often appear to behave irrationally when it would be more correct to say that their behavior shows that they are uninformed or misinformed.

#### Recommendations

1. The Ministry of Agriculture (or the Agricultural Research Corporation) needs to develop a low cost method for disseminating farming and marketing information to a large proportion of the farmers in the Western Sudan. We suggest that they invest in radio broadcasting equipment and an operator's license. Radios are ubiquitous in the rural areas. Nearly everyone has access