

region, there are opportunities for the production of sheep or cattle on range forage. Such production should be carried out largely independent of irrigation facilities.

In the non-waterlogged, moderately-saline areas, provision of drinking water, clearing of heavy brush, and seeding of salt-tolerant grasses such as alkali sacaton, elephant grass, squirreltail or wild-rye could provide an annual carrying capacity of one animal unit (1 cow and calf or 5 sheep) per 25-50 acres.⁽²⁾

Because of the seasonal nature of the rainfall, it would be necessary to provide approximately $1\frac{1}{2}$ pounds of supplemental feed (such as cottonseed cake) per animal unit per day for four months during the rabi season. This requirement could be met by developing interregional trade, i.e., cottonseed cake, a by-product from cotton production in the irrigated region, could be an important input in the barani area.

Exact cost estimates for the needed range reclamation are difficult to make; however, comparable projects in the United States have cost from Rs 20 to Rs 40 per acre.⁽³⁾ With average range management, there are few maintenance costs, and the range should produce at capacity for at least 10 years. This would mean an amortized cost of 2.5 to 5 rupees per acre per year.

The sales value of animals at the farm shows great variation; in the case of sheep, current prices may range from Rs 15 to Rs 35 per head.⁽⁴⁾

(2) See A. Johnston and I. Hussain, Grass Cover Types of West Pakistan, (October, 1962) for carrying capacities of various types of range land.

(3) Data supplied by U.S. Dept. of Agriculture. Representative costs are as follows:

Seedbed preparation, approximately \$2.00

Seed costs, approximately

40 percent Switchgrass

40 percent Sideoats Grama

10 percent Green Sprangletop

10 percent Plains Bristlegrass

Total \$5.50

Amortized 10 years at 6 percent = \$.73/acre/year

(4) Several shepherds reported that lambs sold at Eid bring more than Rs 40 per head.