The primary benefit of excavated ponds would be in the production of fish; however, such ponds could substitute in part for drainage works, and could also provide water storage and other benefits.

Pond fish are reported to sell in the agricultural districts at Rs 45 to Rs 60 per maund. Prices are, of course, higher in the cities and lower in areas of high production far from markets (Manchar Lake, for example). Rs 0.5 per pound appears to be a fair estimate of the rural price. Assuming an annual yield of 300 lbs per acre, the income from ponds would be of the order of Rs 150 per acre per year. Capitalized at six percent this return would justify an investment of about Rs 2500 per acre or only about half of the cost. No maintenance cost is included for it is assumed that any annual costs will be compensated by improved yield.

While excavated ponds could contribute a highly important component to diets the current returns from fish would not cover the estimated costs of construction. There are other benefits, however, and the complete benefit-cost ratio would depend on values assigned to ponds as:

a) a substitute for tubewells in early stages

b) an impondment for flood waters, and

c) a source of aquifer recharge.

Ponds may have especially beneficial effects prior to the installation of tubewells. Evaporation from ponds in low-lying areas would contribute significantly to withdrawal of water from the aquifer. Underground drainage into these ponds could be considerable in areas of permeable soils and high water tables. Added irrigation water or discharge (depending upon water quality and suitability) could be obtained by the use of simple lift pumps.

Excavated ponds also would add to the flexibility of management of surface drains. Such drainage ponds would increase in salinity but probably could continue to provide a good harvest of fish, depending upon the availability of suitable fish species and aquatic plants. At least one species of estuarine fish from Pakistan appears to do very well in saline ponds. This results in part from the depression of populations of natural predators and competitors. In the Salton Sea of Southern California, marine species have been introduced with spectacular success. Some of the high productivity of the