

This nullified the advantages of this suggestion. Pumping a high order discharge has some other serious disadvantages of quick incrustation, due to the movement of fine formation. The farmers in West Pakistan have found a solution to the incrustation. The solution is the low cost tubewells and their frequent replacement. A farmer's tubewell, to pump one to two cusecs, hardly costs one or two thousand dollars, so that within the life expectancy of the tubewells (assumed ten years), they not only recover the full capital invested within one or two years, but also make tremendous profits out of agricultural produce due to the large amount of available water. So far, the farmers do not know the advantages of multiple strainer tubewells. If they adopt this device by adding three or four strainers, 100 to 150 feet in length, 50 to 80 feet apart, they can pump a high order discharge, even upto 3 or 4 cusecs and, at the same time they can prolong the life of the tubewells. Such a technique of multiple strainers has many other advantages not possible with a single strainer, turbine-fitted tubewells. In Table II, pumping from multiple strainer tubewells with respect to power input and discharge is shown. In these tests, the pump capacity was only 2 cusecs and the strainers were very shallow, hardly 50 feet long with 30 feet of blind pipe and were pumping from very fine sand (mean diameter 0.18 mm.). A longer strainer, installed in medium sand, worked by high capacity centrifugal pump, could yield a higher order of discharge.

TABLE II

Strainer	Depression head in feet	Discharge, in cfs/per gallon	Specific yield in		Power in <i>kwh</i>
			cfs/foot	gpm/foot	
Niazbeg test					
Single	21.50	0.98/441	0.045	20.2	7.50
Double	15.00	1.48/666	0.100	45.0	9.25
Triple	17.24	1.64/760	0.100	45.0	9.40
Niazbeg					
Single	21.20	1.43/653	0.068	30.6	8.90
Double	18.97	1.73/778	0.091	41.0	9.50
Triple	16.13	1.80/810	0.111	50.0	8.80
Kohali Distributary					
Single	19.60	1.10/495	0.060	27.0	8.20
Double	17.25	1.58/711	0.087	39.1	8.84
Triple	17.48	1.70/765	0.100	45.0	9.05
Lahore Branch					
Single	17.00	1.28/576	0.075	33.8	8.02
Double	15.00	1.72/774	0.112	50.4	9.20

Low Order Storage Coefficient of the Indus Formation

The Revelle Panel based their estimate of mining of groundwater on a high order of storage coefficient. Although extensive boring results were available which clearly showed the existence of clay lenses and existence of silty sand, yet