

Waterlogging and Salinity in the Indus Plain: Comment

by

NAZIR AHMAD*

Mr. Ghulam Mohammad, Senior Research Economist of the Pakistan Institute of Development Economics, by publishing his critical analysis of the Revelle Report in Volume IV, No. 3 of the *Pakistan Development Review* [4] has done a great service to the country. A chance has, thus, been created to examine some of the recommendations for the solution of the problem as put forth by the Panel of scientists from America.

Ghulam Mohammad has summarised the major recommendations of the Revelle Report and then commented upon these, giving alternative suggestions. The main recommendations of the report are to install tubewells in the large agricultural regions of the Indus Plain. This suggestion is to supplement the insufficient diversion of the surface water and at the same time to effect the drainage of the land. Ghulam Mohammad has discussed the results of the quality of groundwater, and has concluded, "that groundwater of the Indus Plain are charged with dangerous limits of bicarbonates and sodium contents and their indiscriminate utilization will make the soils alkaline and impermeable." In his opinion, tubewells should not be installed in areas where concentration of sodium or bicarbonates is very high.

Ghulam Mohammad has further put forth the financial workability of the deep open main drains combined with the open or tile field drains. As for water economy on drained land, the author is in favour of keeping a high level of groundwater to meet with a certain amount of crop requirements from sub-irrigation.

Ghulam Mohammad has cautioned against the indiscriminate use of groundwater on the land. At present, according to the Panel of scientists, the main problem is the insufficiency of water for sustained agriculture and lack of proper utilization of agricultural practices. For finding more water and to effect quick drainage, tubewells are suggested and for improvement

*Dr. Nazir Ahmad is the Principal Research Officer (physics) at the Irrigation Research Institute, Lahore.