

A Plan of Action

Because agriculture is beset by a wide range of impediments, the attempt to deal with any one of them in isolation will be balked by the presence of the others. Additional irrigation water, more fertilizer, improved seed and crop varieties, pest and disease control, better cultivation, and salt-free soil are complementary factors of production. Each may increase yields 10 to 30 percent when applied singly, but in combination they can give increases of 200 to 300 percent. The interaction between the factors of production is one of the basic principles of agricultural science (See Chapter 2.

Yet a coordinated attack on all these fronts is virtually impossible when dealing with a planted area of upwards of 25 million acres. Efforts have been made and are being made to deal with every one of the shortcomings we have mentioned, but in isolation rather than in combination. Inevitably the record has been one of too few men with too little material trying to deal with too large a problem.

Our primary recommendation (outlined in detail in Chapter 3) is a reorientation of strategy to concentrate effort on limited project areas. On the administrative side, we recommend a shift from a structure based on function to one based on area. This shift will permit a coordinate attack on all aspects of the agricultural problem in regions of manageable size.

We propose that the major part of the culturable lands of the Indus Plain be divided into some 25 to 30 project areas of roughly a million acres, each manned by a competent and adequate staff under the supervision of a vigorous director with responsibility for modernizing the agriculture of his region and provided with the necessary equipment and supplies. In each project area, tubewells or other means of drainage would be constructed to control the level of the groundwater and the soil salt content, and, where possible, to increase the supply of irrigation water. Chemical fertilizer containing 40 to 50 million pounds of nitrogen would be provided each year; together with better seeds and means for control of plant diseases, insects, and weeds. Maintenance shops for machinery and motor vehicles, and facilities for in-service training, applied research, and plant experimentation, would be constructed and operated. The hydrology of groundwater control by tubewells, as well as considerations of effective management (see Chapter 7), indicate a unit of about one million acres as the approximate size of an efficient project area, at least in the Former Punjab.