

2. For each canal system and crop season studied and for each major crop, the following information:
 - a. The number of acres devoted to that crop;
 - b. The farm price of that crop;
 - c. The yield (maunds per acre) of that crop;
 - d. The normal dates of sowing and harvesting of that crop;
3. The rate of evapotranspiration by months in the area served by each canal system.

These data had to be assembled from diverse sources, none of which gave them in precisely the form required. The total water supply in each canal system was taken to be the sum of canal diversions and natural precipitation. Records of monthly precipitation in each agricultural district are given in the series of reports issued by the Irrigation Department, entitled Irrigation Operations Statement of the Kharif Crop of West Pakistan and Irrigation Operations Statement of the Rabi Crop of West Pakistan. Since the data in those reports give rainfall by agricultural district, rather than by canal system, they had to be converted to the desired basis. This was accomplished for each canal system by averaging the rainfall in the districts it served, weighting each district in proportion to the number of acres cropped. The resultant estimates of average rainfall in the area served by each canal were further modified to allow for the fact that natural precipitation is not completely effective in supplying water to crops. For this purpose, the factors supplied by Blaney and Criddle in Report on Irrigation Water Requirements for West Pakistan(6) were used to convert estimated actual precipitation into estimated effective precipitation.

The amount of water provided by canals was derived from estimates of canal diversions, by major canal divisions, prepared for us through the kindness of the Irrigation Department. These data, also, had to be averaged to obtain irrigation "deltas" by canal system from the deltas in each canal division. The same procedure was used, that is, the diversions on the separate divisions of each canal system were averaged, using as weights estimates of the number of irrigated acres served by each canal division. The resulting estimates of diversions by canal system were reduced by 30 percent

(6) Denver: Tipton and Kalmbach, Inc., April 30, 1957, Table 15.