

Effect of Irrigation

Compared to rainfall, canal irrigation gives an assured and fairly well-regulated supply of water for agriculture. The times of water application can be adjusted to be of benefit for planting, early growth, and maturing of the crops. It should be expected, therefore, that a direct correlation would exist in West Pakistan, as elsewhere, between the percentage of sown land under canal irrigation in the different agricultural districts and average yields per acre. That this correlation exists is shown in Figure 1, but the variation between irrigated and non-irrigated lands is smaller than in many other regions of the world. In the Lyallpur District, where somewhat more than 100 percent (12) of the planted acreage is irrigated each year by canals, the value per acre of plant crops is Rs 185. Montgomery and Multan also have about 100 percent canal irrigation of the gross planted area, and show the second and third highest yields per acre, Rs 155 and Rs 144. The yields per acre diminish as the percentage of canal irrigation decreases. In Gujrat and D.G. Khan, the percentage of canal irrigation is about 45 percent, and the yields per acre are, respectively, Rs 100 and Rs 70. The yields for these two Districts average slightly more than those for the dry-farmed lands of the northern Former Punjab.

The mean amount of water available in these dry-farmed Districts is larger than in the irrigated lands to the south, but nearly all of it comes from variable and uncertain rainfall. In some of the northern areas, particularly in Sialkot, rain is supplemented by water from Persian Wells, and yields are considerably higher than in the solely rain-fed regions.

Livestock and Poultry

In 1960, the estimated livestock population of West Pakistan included: 9 million cattle; 6.5 million water buffaloes; 12 million sheep and goats; and 7 million chickens. If estimates (13) made for northern Former Khairpur can be extrapolated to the entire Province, about 17 percent of the cattle and 49 percent of the buffaloes are milk cows. Nearly half the cattle are working bullocks; the remainder, about a third of the total population, are young animals (less than three years old) or cows without calves. Only two percent of the buffaloes are mature males, while about 45 percent are young animals or barren cows.

---

(12) Complete double cropping is considered to be 200 percent utilization.

(13) Hunting Technical Services: "Khairpur Report," 1962.