tilizers; by 1970, fertilizer production had increased sixfold to 1.24 million tons, while consumption jumped eightfold to 2.56 million tons. Today, both production and consumption have more than doubled once more, and India has emerged as the world's fourth largest producer and consumer of nitrogenous fertilizer.

Moreover, from 1956 to 1971, the number of tractors in India doubled. In terms of the other critical input for modernization—water—in 1950, a total of 22.6 million hectares were under irrigation, mainly by surface water. By 1980, more than 50 million hectares had been brought under irrigation; surface water irrigation nearly doubled, and groundwater irrigation nearly quadrupled.

Even in the worst years for Indian agriculture, when India was forced to import grains in some quantity, at no time did grain imports ever amount to more than 5 percent of the country's food supplies. But while the overall production achievements correlate with scientific and industrial benchmarks, the process of agricultural modernization has been uneven across the country.

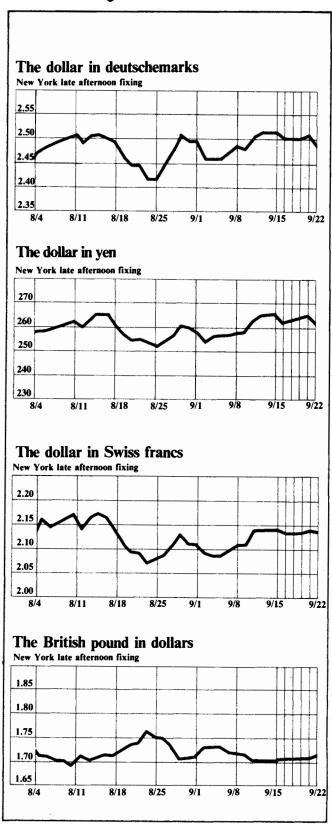
The states of Punjab and Haryana (and, to a much lesser extent, western Uttar Pradesh) supply all the surplus food grains for government procurement. No other state produces an appreciable marketable surplus. Crop yields in Punjab are uniformly at least double the all-India average, and rank favorably on an international scale (see Figure 2). Fertilizer use per hectare in Punjab is the highest of any state, at an average of 113 kilograms per hectare as of 1980-81. Next in line is Haryana, whose fertilizer consumption corresponds to the all-India average, at about one-third of the Punjab level. At the other end of the scale is Rajasthan, at about 11 kg. per hectare.

Similarly, Punjab has the most extensive irrigation, with the highest percentage of net irrigated area to net cultivated area of any state, and more than three times the all-India average of 27 percent. With Haryana, Punjab has the highest percentage of area under high-yielding varieties of wheat and rice. Likewise, doubling of tractorization in India between 1956 and 1971 was most accounted for by the expansion of tractor use in these two states

India could feed the world

The basis for extending the achievements won in Punjab and Haryana has been carefully laid in the research and extension infrastructure in each state, and as Dr. Jain emphasized, significant progress is already being made. In some cases major capital investments are underway or in the planning stage. The vast Gangetic Plain of Uttar Pradesh, now menaced by problems of flood control and climatic instability is potentially capable of feeding the entire world. In the west, the great Rajasthan Desert awaits greening with the completion of the huge Rajasthan Canal Project. The canal, one of the largest of its kind in the world, was initiated in 1958 and when completed, will bring more than 1 million hectares of land under irrigation.

Currency Rates



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