

scantiest harvest. In others, only a fraction of the people remain, and the deserted mud houses of those who were forced to leave have disappeared. The average farmer now wrings a bare living for himself and his family from less than seven acres, broken into scattered plots. At the same time that new lands are being brought under the plow, older lands are deteriorating. In a country of farmers, food must be imported to provide the most meager diet; the gap between food production and the number of mouths to be fed is widening.

In order to understand what has happened and what may be done, we need to examine in detail the resources of land and water in the Indus Plain, the human resources of the country, and the state of agriculture.

The Land

On a map, the Indus Plain of West Pakistan has a shape roughly like the silhouette of an hour glass. It is rimmed abruptly on the west by the Kirthar and Sulaiman Mountains, on the northwest by the Salt Range, and on the north by the foothills of the Himalayas. To the northeast and east, the plain extends into Kashmir and India. On the southeast, the sand dunes of the Thar Desert press against the plain and constrict its width. Its southernmost segment is the delta of the Indus, which fades into the giant salt pan called the Rann of Cutch and gradually becomes submerged beneath the Arabian Sea.

The area of the plain is about 80,000 square miles, half the size of the State of California. From the Himalayan piedmont to the Arabian Sea, its length is more than seven hundred miles; its width varies from two hundred miles in the former state of Punjab to about fifty miles in the narrow neck between the Thar Desert and the Sulaiman Mountains.

To a traveler, the plain appears as level as the sea; actually it has a very gentle slope of about a foot per mile from the base of the Himalayan foothills to the ocean. Lahore, seven hundred miles inland, is seven hundred feet above sea level.

Geologically, the Indus Plain is part of a broad downwarp that extends westward from the Bay of Bengal under the flood plain of the Ganges and thence across the subcontinent to the Arabian Sea. In its western half, this downwarp has been leveled and filled, to depths of many thousand feet, with the sands and silts deposited by the Indus and its tributaries.