

Natural Environment

Situated in South Asia, Pakistan borders the Arabian Sea to the south, Iran to the southwest, Afghanistan to the northwest, China to the northeast and India to the east, although as of 2011 it disputes its northeastern border in the Kashmir region. Pakistan is about twice the size of California in terms of land area, and the sixth-largest nation in the world in terms of population. The Indus River, one of the world's chief waterways, cuts through the country. Pakistan can be divided into three primary topographic areas: the plain of the Indus River, the Balochistan Plateau and the northern mountains.

Waterways

Pakistan has a 650-mile-long coastline along the Arabian Sea, itself part of the larger Indian Ocean. Terminating at the Arabian Sea, the great Indus River drains the entire country, with the exception of Balochistan's far western desert. A length of about 1,800 miles makes the Indus one of the longest rivers in the world, and the volume of its average annual flow is double the Nile's. The Indus River begins high in the Tibetan Himalayas, crosses into India and then enters Pakistan, turning toward the southwest and flowing through the heart of the country. Near its mouth at the Arabian Sea, the Indus fans out into multiple branches, forming a delta. Other significant rivers in Pakistan include the Sutlej, Jhelum, Chenab and Ravi, all of which begin in India and flow southwestward into Pakistan, draining into the Indus. The arid west of Pakistan lacks major rivers.

Indus Plain

The Indus River Plain extends from the Indus River eastward across Pakistan to the border with India. Sloping gently downward from north to south, this vast flatland covers about 200,000 square miles. With the exception of the Thar and Cholistan deserts in the far east, silt deposited by the Indus River from upstream renders most of the area highly fertile. As the world's biggest irrigation system, the Indus River has nourished the development of agricultural societies since ancient times. The swampy delta region of the southern Indus Plain floods regularly and supports the growth of mangrove forests.

Balochistan Plateau

The immense Balochistan Plateau covers more than 40 percent of the country. This vast region extends from central Pakistan westward to the Iranian and Afghan borders. Four mountain ranges -- the Makran, Kirthar, Brahui and Sulaiman -- front the plateau's eastern edge,

essentially forming the geologic dividing line of Indian subcontinent. These mountains block humid air from the Arabian Sea from streaming north and west, rendering the Balochistan Plateau quite arid. The plateau's height averages about 2,000 feet.

Mountains

Pakistan is home to the Earth's highest mountains, the Himalayas, which extend into northern Pakistan and its Kashmir territory. The second highest peak on the planet, K2, rises to 28,250 feet in far northeastern Pakistan along the Chinese border. Nearby, the world's ninth-highest summit, Nanga Parbat, reaches 26,660 feet, and the world's 11th-highest peak, Gasherbrum, rises to 26,470 feet. Not to be outdone, to the west of the Himalayas the 500-mile-long Hindu Kush range of Pakistan and Afghanistan includes two dozen mountains above 23,000 feet; the highest, Tirich Mir, reaches 25,230 feet. Relatively smaller ranges edge the Afghan border, including the Safed Koh, Toba Kakar and Ras Koh mountains.

Climate

Pakistan lies in the temperate zone. The climate is generally arid, characterized by hot summers and cool or cold winters, and wide variations between extremes of temperature at given locations. There is little rainfall. These generalizations should not, however, obscure the distinct differences existing among particular locations. For example, the coastal area along the Arabian Sea is usually warm, whereas the frozen snow-covered ridges of the Karakoram Range and of other mountains of the far north are so cold year round that they are only accessible by world-class climbers for a few weeks in May and June of each year.

Pakistan has are four seasons: a cool, dry winter from December through February; a hot, dry spring from March through May; the summer rainy season, or southwest monsoon period, from June through September; and the retreating monsoon period of October and November. The onset and duration of these seasons vary somewhat according to location.

The climate in the capital city of Islamabad varies from an average daily low of 2° C in January to an average daily high of 40° C in June. Half of the annual rainfall occurs in July and August, averaging about 255 millimeters in each of those two months. The

remainder of the year has significantly less rain, amounting to about fifty millimeters per month. Hailstorms are common in the spring.

Pakistan's largest city, Karachi, which is also the country's industrial center, is more humid than Islamabad but gets less rain. Only July and August average more than twenty-five millimeters of rain in the Karachi area; the remaining months are exceedingly dry. The temperature is also more uniform in Karachi than in Islamabad, ranging from an average daily low of 13° C during winter evenings to an average daily high of 34° C on summer days. Although the summer temperatures do not get as high as those in Punjab, the high humidity causes the residents a great deal of discomfort.

Most areas in Punjab experience fairly cool winters, often accompanied by rain. Woolen shawls are worn by women and men for warmth because few homes are heated. By mid-February the temperature begins to rise; springtime weather continues until mid-April, when the summer heat sets in. The onset of the southwest monsoon is anticipated to reach Punjab by May, but since the early 1970s the weather pattern has been irregular. The spring monsoon has either skipped over the area or has caused it to rain so hard that floods have resulted. June and July are oppressively hot. Although official estimates rarely place the temperature above 46° C, newspaper sources claim that it reaches 51° C and regularly carry reports about people who have succumbed to the heat. Heat records were broken in Multan in June 1993, when the mercury was reported to have risen to 54° C. In August the oppressive heat is punctuated by the rainy season, referred to as *barsat*, which brings relief in its wake. The hardest part of the summer is then over, but cooler weather does not come until late October.