

About Tibet

Terrain

Tibet, the place at the highest altitude of the world, is located in the west and south of Qinghai-Tibet Plateau, occupying half the area of the plateau. The area of the regions at the height over 4,000m above sea level accounts for 85.1% of the total, which gives Tibet the name as “the roof of the world” and “the third pole of the world”. The terrain of Tibet is composed of Northern Tibetan Plateau, Yarlung Zangbo River Basin and Eastern Tibetan Canyon. The plains are mainly distributed in several reaches of Yarlung Zangbo River, the middle & lower reaches of Lhasa River, Nianchu River and Niyang River, and the middle reach of Yiong Tsangpo, Bum Chu, Longzi River, Sênggê Zangbo and Langqên Zangbo.

Climate

1. Thin air, low air pressure and low oxygen content: the average air density is 60%-70% to that at sea level and the oxygen content on the plateau is 35%-40% less than that at sea level. 2. Strong solar radiation and long duration of sunshine (1,443.5 hours/year-3,574.3 hours/year): The annual sunshine duration in most regions of Ngari Prefecture and east Shigatse is over 3,000 hours; that in midwest Nagqu Prefecture, east Shigatse and west Shannan is 2,800 hours – 3,300 hours; and that in east Nagqu Prefecture, west Chamdo, Lhasa River valley and Nianchu River valley is 2,500 hours – 3,000 hours. 3. Low air temperature, less accumulated temperature and great temperature difference between daytime and night: The annual average temperature is -2.4°C - 12.1°C, descending from southeast to northwest; the monthly average temperature reaches high peak in June or July and low peak in January; the daily temperature difference in most places of Tibet exceeds 15°C, and is great in winter and slight in summer. 4. Less rainfall, significance seasonal change and high rate of night rain: The annual precipitation ranges from 66.3mm – 894.5mm, descending from southwest to northwest, and mainly occurs from May to September, accounting for 80%-95% of the total in a year. 5. Long duration of dry season with high rate of gales, and high frequency of hail and thunderstorm in summer: Most places of Tibet experience over 30 days of gale in a year, while the gale in the west and north Tibet may last 100 to 160 days, mostly occurred in winter and spring. Tibet holds the highest frequency of hail in China. 6. Wide variety and high frequency of meteorological disasters: Disastrous weather such as drought, floods, snowstorms, frost, hail, thunder, wind and sandstorms occur frequently. 7. Climate types are complicated and greatly varied vertically from southeast to northwest: Tropical, subtropical, temperate plateau, plateau sub-frigid zone, plateau cold zone.

Natural resources

1. Solar radiation. The annual solar radiation in Tibet totals 140 kcal/m² - 200 kcal/m², nearly twice the amount in eastern coastal area of China.
2. Wind resources. Tibet is one of the places with most gales (≥ Level 8 or 17m/sec) in China, with annual average duration of 100 days to 150 days (200 days to the maximum), 4 to 30 times to the duration in east China at the same latitude.

3. Water resources. Statistics show that the total water resources of the region is 439.465 billion cubic meters (excluding groundwater), accounting for 16.21% of the total river runoff in China, ranking first in China; the occupancy of water resources per capita and acre also tops China; the theoretical reserve of hydropower resources in the whole region is 210 million KW, and the technically developable capacity is 140 million kilowatts, ranking first in China.

4. Grassland and arable land. Tibet holds a natural grassland of 1.334 billion mu (about 8,893,333km²), accounting for 74.11% of the total area of the region and ranking first in China, of which the area of available natural grassland is 1.129 billion mu (about 7,526,666km²), arable land 6,626,600mu (about 4,417km²) (including 622,600mu or about 415km² paddy field, 3,982,100mu or about 2,654km² irrigable land and 2,021,900mu or about 1,347km² dry land) and 3,770,200mu (about 2,513km²) sowing area of crops.

5. Forest resources. The forestland area and forest area of Tibet are 17.98 million and 14.1 million hectares, respectively; the forest coverage is 12.14%; the forest reserve is 2.283 billion cubic meters; and the total reserve of standing timbers is 2.288 billion cubic meters, ranking first in China. Of the forest area, the area of natural forests and man-made forests is 14.83 million and 80,000 hectares, respectively.

6. Plant resources. Tibet has more than 9,600 kinds of wild plants, of which 855 are unique and over 6,600 are advanced, including 700+ bryophyte and 5,900+ ferns and spermatophyte. There are 415 kinds of edible mushrooms and 238 kinds of medicinal fungus. Tibet also has 110 kinds of vegetables including highland barley, wheat, corn, oilseed rape and beans.

7. Animal resources. Tibet has 795 kinds of wild vertebrate (of which 125 are national protection species, accounting for over 1/3 of national total, and 196 are unique in Tibet), including 145 kinds of mammals, 492 kinds of birds (of which 22 are unique in Tibet), 55 kinds of reptiles, 45 kinds of amphibians and 58 kinds of fishes. The region also has over 4,200 kinds of insects and more than 760 kinds of plankton.

8. Wetland resources. Tibet owns a variety of wetlands in 6.529 million hectares, accounting for 5.43% of the national territorial area of the region and ranking No.2 in China, which makes it one of the provinces with most complete variety and highest number of wetlands in China. 90% of the wetlands remain their original state.

9. Mineral resources. Tibet has discovered 103 types of minerals (including sub-types), 46 types of minerals with proven reserve and over 3,000 ore deposits, occurrences and mineralized spots, including 5 energy minerals (3 with proven reserve), 32 metal minerals (19 with proven reserve), 64 non-metal minerals (26 with proven reserve) and 2 vapor minerals (1 with proven reserve). The mineral resources discovered in Tibet, including copper, chromium, lead-zinc-silver polymetallic, molybdenum, iron, antimony, gold, lithium, boron & potassium in salt lake, high-temperature geothermal, natural mineral water, are advantageous and promising in exploration. Of the mineral resources with proven reserve, chromium and copper hold resource reserve, and the reserve of salt lake lithium and high-temperature geothermal rank the top in China.