

flat chalky surfaces surrounded with sand—and therefore all the traffic routes pass through them.

Lake Ngami¹ is the central point of an inland water-system of South Africa, in lat. $20\frac{1}{2}^{\circ}$ S., long. 23° E., at an altitude of about 3000 feet above sea-level. The lake was once 20 miles long and 10 miles wide, but is now dry, consisting merely of an expanse of reeds growing in a soft, treacherous soil, below which brackish water is found at a depth of 20 feet. The former feeder of the lake was the Taukhe or Tiohge River (known in the upper part of its course as the Okavango or Cubango River), which entered at the north-west end, but now a portion at least of its waters passes by a channel north of Lake Ngami into the Botletle or Zuga River, by which the overflow of the lake was formerly carried off eastwards at the time of high water. The Botletle River loses itself in a system of salt-pans—round or oval basins of varying size sunk to depths of 30 to 45 feet in the sandstone, and often bounded by steep banks. The largest of these is the salt-pan called Makarrikarri. The outer pans are dry for a large part of the year, the whole system being filled only at the height of the flood season in August.

The lowest twenty miles of the Taukhe River are said to have been dry since about 1890, the district intersected by the river-beds now growing corn in great plenty. The cessation of the river's flow was caused, according to native report, by a blocking of the channel by thousands of rafts, on which the Makoba natives brought down their yearly tribute of corn.

Precipitation is greater in Northern Kalahari than in the southern and central portions. In the former the river-courses are marshy even in the dry season. Flooded plains still hold a little water at the end of the dry season, and sand-pans with permanent ponds are not uncommon. In Southern and Central Kalahari the salt-pans contain water only in the rainy season; at other times they dry up and leave behind a crust of salt.

Underground water does not exist to any extent in the Kalahari as in the Sahara. In the dry regions the scanty rainfall is absorbed by the sand, and evaporates in the long dry season; in the alluvial regions underground water is comparatively small in quantity, for the steep crumbling ground-rock does not form a good water-way.

SOUTH
AMERICA.

The inland drainage areas of South America are estimated by Murray at over 500,000 square miles (see fig. 69).

According to Neveu-Lemaire,² the region of South America lying

¹ See *Encycl. Brit.*, ed. 10, vol. xxxi. p. 228; see also note on Dr Poch's expedition, *Geogr. Journ.*, vol. xxxiii. p. 601, 1909.

² See "Le Titicaca et le Poopo," *La Géographie*, vol. ix. p. 409, 1904.