

## CHAPTER XXVI.

### PRECIPITATION IN N.W. INDIA COMPARED WITH THE OSCILLATIONS IN THE LAKES.

From the records of precipitation in N.W. India available to me I have tried to arrive at some conclusion regarding the relations between the changes in precipitation and the oscillations of the lakes. In his monograph on the *Rainfall of India*, BLANFORD regards the total annual rainfall of the Panjab, taken as a whole, as subject to smaller vicissitudes than that of other provinces in N.W. India.<sup>1</sup> Any drought affecting the North-Western Provinces during the summer monsoon he regards as usually shared by the Panjab, though the deficiency is often compensated by the more copious rainfall in the earlier part of the year.

The period of observations, however, does not reach sufficiently far back to enable us to draw any conclusions. But in Table No.16, Simla,<sup>2</sup> we find great variations in the rainfall since 1862. Thus in 1867 it was only 52.10 inches, and in 1875 91.39. A regular periodicity cannot be said to exist. In Dehra Dun the observations go back to 1844, and there are differences between 35.11 (1848) and 119.93 (1885). In Katmandu the differences move between 33.18 inches (1864) and 70.38 (1861).

Dr. GILBERT T. WALKER has discussed the problem of the *Meteorological evidence for supposed changes of climate in India*.<sup>3</sup> According to Dr. WALKER the comparative weakness of the monsoon in N.W. India after 1894 has given rise to conjectures that the climate had altered permanently in that region. Increase of irrigation or diminution in forests had, amongst other things, been made responsible for the change.

Dr. Walker makes a very interesting comparison between the abundance of the monsoon rainfall of N.W. India and the Nile flood: »Of the countries affected by the monsoon the only area for which reliable data extend over a satisfactorily long period is Egypt, where the Nile data extend back as far as 1737 except for a break

<sup>1</sup> Indian Meteorological Memoirs, published by H. F. Blanford. Vol. III, Calcutta 1886—1888, p. 257.

<sup>2</sup> Ibidem p. 282.

<sup>3</sup> Memoirs of the Indian Meteorological Department. Vol. XXI. Part I. Simla 1910.