

**CORRESPONDENCE ON  
THE SUBJECT  
OF THE GEOLOGICAL  
MAP OF INDIA**

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Correspondence on the Subject of the Geological Map of India by Professor Greenough

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**PROFESSOR GREENOUGH**

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**GEOLOGICAL MAP OF INDIA,**

COMPILED BY

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**MADRAS:**

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1857.

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DESPATCH FROM THE HONORABLE COURT OF DIRECTORS  
IN THE PUBLIC DEPARTMENT.

No. 49 of 1854.

OUR GOVERNOR IN COUNCIL,  
AT FORT ST. GEORGE.

1. We forward to you a No. in the Packet ten copies of a Geological map of India compiled by Mr. G. B. Greenough from such materials as he has been able to collect and which we think may be made the means of procuring further and more correct information than is now available on a subject which we consider to be one of great interest on both scientific and economic grounds.

2. In order that this object may as far as possible be attained we direct that a copy of the Map be forwarded to such of the Departments under your Government as may be likely to possess information on the subject, and to such individuals as you may believe to be qualified by their acquirements and pursuits to afford assistance with instructions to test the accuracy of the Map by such information as they may possess or may be able to obtain with regard to any particular portions of the country, and to communicate the results marked upon the Maps, which are to be returned to your Government accompanied by a full statement of the grounds on which they may base their conclusions.

3. We are desirous that this information should be obtained with as little delay as is practicable with reference to the time which the officers to be consulted may have to apply to the object, and we should hope, that within twelve months from the receipt\* of this Despatch you may be able to acquaint us with the result. At all events we direct that at the expiration of that period you furnish us with a report of the information already obtained and of the prospect which may exist of further particulars being supplied within a reasonable time.

We are,  
Your loving Friends,  
J. OLIPHANT,  
E. MACKAGHTEN,  
W. B. BAYLEY,  
R. ELLICE,  
GEO. POLLOCK,  
R. D. MANGLES,  
J. H. ASTELL,  
J. W. HOGG,  
H. T. PRINSEP,

LONDON, 27th September 1854. C. MILLS.

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\* 30th November 1854 but the Maps did not arrive till June 1855.



PUBLIC DEPARTMENT.

No. 1268.

*Extract from the Minutes of Consultation, dated 28th November 1854.*

The Right Honorable the Governor in Council proceeds to pass orders on a Despatch from the Honourable Court of Directors, dated 27th September, No. 49 of 1854.

General Cullen,  
Surgeon Balfour,  
Dr. Hunter,  
Rev. F. Muzzy.

Forward 10 copies of a Geological Map of India which may be made the means of procuring further and more correct information than is now available with this view direct, that a copy be sent to such of the Departments and individuals as may be likely to afford the information sought, which will be marked on the Maps and returned to Government, accompanied by a full statement of the grounds on which their conclusions are based.

Are desirous that this information be obtained with as little delay as possible, and the result communicated to Honorable Court at the expiration of 12 months from the date of the receipt of this despatch.

the Maps with their observations marked thereon, a full report of the nature called for by the Honorable Court.

Resolved that copies of this despatch and of the Maps referred to, when received, be forwarded to the gentlemen named in the margin—also, to the Revenue and Military Departments, for communication to such Officers as may be qualified for the task, with a request that they will afford all the assistance in their power towards the attainment of the object in view and submit as early as practicable, together with the return of

H. C. MONTGOMERY,  
*Chief Secretary.*

QUARTER MASTER GENERAL'S OFFICE.

No. 144.

From

THE QUARTER MASTER GENERAL OF THE ARMY.

To

THE SECRETARY TO GOVERNMENT,

MILITARY DEPARTMENT.

SIR,

Having now received replies from the different Officers who were addressed to furnish Geological information for Mr. Greenough's Map referred to in the Extract Minutes of Consultation dated 28th November last, No. 1268, I have the honor by order of the Provincial Commander-in-Chief, to forward two Reports from Major Dallas, Deputy Assistant Quarter Master General, Ceded Districts, (who states that he is mainly indebted to Superintending Surgeon Cole for the observations he has recorded); from Col. Græme, Commanding 5th Light Cavalry, regarding Hyderabad and the Deccan; from Captain Burton, Deputy Assistant Quarter Master General Southern Division, as to the countries comprehended within his limits, and a copy of a letter from the Deputy Assistant Quarter Master General, Northern Division, who states, that as far as his information enables him to judge, the entries in the Map are correct. Information in the Saugor Division has been sent direct by Major Jenkins, Deputy Assistant Quarter Master General of that Division.

The Maps which were sent to this Office are herewith returned.

FORT ST. GEORGE, }  
21st May 1856. }

I have, &c.,

F. A. REID,  
*Quarter Master General.*

OBSERVATIONS ON THE GEOLOGICAL FEATURES OF THE CEDED DISTRICTS WITH REFERENCE TO MR. GREENOUGH'S MAP OF INDIA.

The Ceded Districts,\* comprising the Collectorates of <sup>28,688</sup> Square Miles. Bellary and Cuddapah and the District of Kurnool, are situated between the 13th and 17th degrees of north latitude, and the 76th and 80th east longitude. The general character of the country is an extensive table land, sloping from west to east. The general elevation on the west being from 2,000 to 2,500 feet. Bellary being 1,600, from whence the declination westward continues to the eastern boundary which is about 450 feet. The western ghauts form the anticlinal line to which the arenaceous and schistous eastern ranges are more or less conformable.

2. The aspect of the Ceded Districts presents a vast surface of apparently boundless plains, broken here and there by detached rocky hills and occasional clusters and chains of low elevation. The exception to this general character of the country, are the ranges of the Soondoor, Nulla Nulla and Gurrumcondah Hills.

3. The soils consist of three classes, the Regur, (black), Musub (mixed), and Lal (red.) The former, which in the Bellary District alone covers an extent of one million acres, is from 1 to 12 feet in depth and is mingled with decomposed felspar, gritty particles of quartz, and often covered with angular pebbles of white quartz, ferruginous quartz and jasper. Water is rarely found in these black lands except at a great depth, and villages are few and far apart. In the Cuddapah District the decomposition of the limestone, calcareous veins, clay slate and sandstone, imparts a lighter colour and a looser texture to the regur; below this soil is generally found a konkrous deposit resembling white gravel, which is found to answer well for metalling roads. An Officer at present employed in superintending the construction of roads in this District was desirous of aiding the enquiry into the origin of the black cotton soil, by making excavations along the line under his charge and furnishing a series of sections extending over a considerable distance. Had time permitted such an investigation, more accurate data would have been obtained, to form a correct opinion regarding the nature of the underlying strata, and some important facts would probably be elicited.

4. The musub or mixed soil is found in all parts of the Ceded District and covers in extent double that of the pure regur.

The lal is hard, gravelly and sterile, seldom cultivated, and often covered with low jungle. In the Bellary District there are about two and a quarter millions of acres of this land.