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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 597 Press Mis.

446.447

Dated 26 - 2. 1866.

Not to be folded or roughly handled

No. 36 C.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

Civil Works.

Communications.

To THE SECY. TO THE GOVT. OF FORT ST. GEORGE,
IN THE PUBLIC WORKS DEPARTMENT.

FORT WILLIAM, JANUARY 13, 1866.

SIR,

I am directed to forward the papers marginally noted, for such action as the Government of Madras may desire to take in the matter. An investigation of the question raised by Colonel Lawford seems to the Governor General in Council to be desirable.

Para. 4 of P. W. D. letter to the Commissioner of Coorg, No. 35, dated 13th January 1866.
Extract para. 3 of letter from Commissioner of Mysore, No. 442—23, dated 15th November 1865.
Paras. 2 to 8 of Memorandum by Colonel Lawford, dated 13th November 1865.

I have the honour to be,
SIR,
Your most obedient Servant,

Lieut.-Col., R. A.,
Secy. to the Govt. of India.

5-5/...

Proc. of Public Works Depart-
ment Letter to the Commissioner of Coorg
No. 35 Dated 13th January 1866. -

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1. I am to refer for this to the removal
of floods, consequent on the clearances
which are being carried out, the effect which
this increase is likely to have on the rivers
which drain the lands, and Colonel Lawford's
proposal that reservoirs be constructed
in the hills with the double object of
restraining floods, and preventing the failure
of summer water. The attention of the
Madras Government will as suggested
by you, be drawn to the subject. Detailed
investigations with a view to carry out
proposals for forming reservoirs, should
further enquiry prove it to be necessary
and possible, does not at present form part of
the information now
supplied, appear to His Excellency in
Council to be desirable, and this portion
that in the enquiries made some years ago,

Proc. of Govt. for February

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

CIVIL WORKS.

No. 396

To

SECY. TO GOVT. OF FORT ST. GEORGE,
IN THE PUBLIC WORKS DEPT.

No. 36 C.

Dated January 13, 1866.

Received " 29 "

22

Forwards, for such action as the Government of Madras may consider necessary, papers relating to a proposal by Colonel Lawford for the construction of reservoirs on the Hills.

No. 460

dated 12th February 1866 Q. 15

No. 2597 - 20th July 1866.

and which are referred to by Colonel Lawson, such information may have been supplied as will assist the Government of Madras in arriving at a conclusion on the subject:—

Extract from a letter from the Commissioner of Coorg to the Secretary to the Govt of India Public Works Department dated the 15th November 1865 No $\frac{442}{23}$.

Para: 3. The singular effect produced on Coorg roads by the extensive clearance of jungles by Coffee Planters has not hitherto been represented in so intelligible a shape as that in which it is depicted by Major Sankey. The matter however has not escaped attention - and in the Coffee land rules recently introduced under orders from Government a clause is inserted (in the title deed) that land is not to be cultivated within 5 yards of a public road and that the natural fringe or retirement formed by brushwood or grass is not to be destroyed. It is apparent, however, that where clearances have been made, the evil referred to is already in existence, and it is not easy to see how it can be remedied. The subject is touched on in para: 34 of the Superintendent's report for 1864/65, and the prejudicial effect on rice lands by the Monsoon torrents being precipitated down the bare sides of hills, no jungle being left to intercept their

Course

...ource was not unfrequently brought to my notice by the Coorg Ryots. It does not appear however to have been proved that the denudation of the forests has lessened the rainfall, although I entertain a little doubt that the monsoon floods are, when deposited, carried rapidly off where the jungle has been cleared, and that they are therefore less beneficial than they would otherwise be. Although, then the diminution of the rainfall may be considered still a debateable point, I am disposed to think that the velocity with which the hill streams are now being carried down to the Cauery and thence to the sea, may, as observed by the Chief Engineer, act detrimentally on the irrigation works in the Coimbatore, Trichinopoly and Tanjore Districts of the Madras Presidency. As a similar effect to that observed in Coorg, must be produced in the contiguous district of Wainad, it may not be out of place to suggest that the attention of the Madras Government might usefully be directed to the subject.

Extract from a Memorandum by the Chief Engr of Mysore on Major Sankey's Report on the State and Prospects of the Public Works Department in Coorg dated 13th Novr 1865.

Para: 2. Although the probable effect of the extensive clearance of hill ranges from their primeval forest in diminishing the amount of rain-fall has often been asserted and sometimes questioned, it has never before that I am aware of, been shewn that the immediate and certain consequence of such denudation is to bring down the floods produced by the monsoon rains with increasing rapidity and volume to the destruction of roads and bridges constructed before such clearance was effected, and that such has actually been the case in Coorg, is indisputably established by facts now traced to their origin for the first time.—

3. But the question has a far wider scope than that of communications as hinted in Major Sankey's postscript, and should be considered in its possible influence on the great River, which is fed by the streams descending from the hills that have been turned into Coffee plantations extending over a range

of

of 240 miles from North to South, and covering an area of at least 6600 square miles, according to the calculation of Colonel Mackenzie, or from Munzerabad in Mysore to Putney in Madura.

4. Whatever be the cause it is certain that during the last five years the freshes of the Cauvery in Trichinopoly and Tanjore have attained a height previously almost unknown, and if this is in any degree due to the influence which has certainly destroyed the roads and bridges in Coorg, the subject is one for deep anxiety, for there is little doubt that in the course of time, the Annamullays and Pulneys will be covered with plantations, as the Neilgherries, and the hills of Wynad, Coorg and Mysore are now.

5. It is not only the floods that are to be dreaded as the effect of this interference with nature, but the opposite evil of drought, for it is certain that the most perennial streams (except such as are snow fed) are those which flow from thickly wooded hill ranges, in fact clearly shewn in the drainage of the opposite sides of the Bababoodan Hills in Mysore, and thus the scarcity of water always felt in Tanjore between the freshes may be seriously aggravated.

6. Both may it behoves me on starting them to consider if any means can be suggested for meeting and overcoming an evil which seems to attend the improvement of Coorg at the expense of Tanjore, once the "garden of India".—

7. More than thirty years ago it was shewn by Sir Arthur Cotton that the construction of reservoirs in the Valleys of the Neilgherries and other ranges was a work of the utmost importance to sustain the precarious irrigation of the Cauvery delta, and though no practical results followed his suggestions the subject was seriously taken up by the Madras Government about 9 or 10 years ago, when Engineers were expressly appointed to discover suitable sites for such works and yet after all the project has been entirely dropped.—

8. With the light of experience since thrown on it by the labors of the Coffee planters, the question might now be revived with the double prospect of restraining the increasing floods, and preventing the threatened failure of summer water, and there is no doubt that Madras and Mysore are both deeply interested in the investigation for if by the more rapid flow of the drainage the hill springs should gradually fail, the rice cultivation owned of Coorg and Wynaad must eventually suffer.

Public Works Department

No. 597

Proceedings of the Madras Government

Under date the 20th February 1866.

Read the following

From the Secretary to the Govt of India
P.W. Dept

Forwards for such action as the Government of Madras may consider necessary, papers relating to a proposal by Colonel Crawford for the construction of reservoirs on the Mills.

Hereunder 13th Nov/66 No 3869

Ordered that these papers be communicated to the Superintending Engineer of the 6th Division and to Mr. Spicer, Civil Engineer.

2nd The former will report whether any such notable increase in the magnitude of the freshes of the Cauvery during late years has been noticed in

Trichinopoly and Tanjore as would tend to confirm the validity of Colonel Langford's assumption, that the clearance of Forest land within the catchment basin of that River for Coffee cultivation has had the effect of swelling its floods; and the latter will inform the Govt. in what state of progress the investigations which were entrusted to him for ascertaining the means of storing water in the valleys of the Bhowany the Moyaur and the Noyel were left when his commutation of those

rivers was suspended.

Mr. Fraser will at once submit to Government all plans and documents connected with these investigations that may be in his possession —

To
The Supt Engr 6th Dn
To Mr. Fraser Supt. Engr.
&c: &c: &c:
Supt Engr 7th Dn

Dated 21st February.

11-11-32 B III

Co W. 1066 Deptt

Pro: of Court for February

A° 59/

Pro: of the Madras Court

D/ 20th February/65

Pavilion Co. 2415 66

A° 446-447