

2. Date of Report 13-7-53
3. Initials of Refr

M.R.O. 1-30,000-16-10-29

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.
Cons 2/1/53

G.O. No. <i>71-172</i>	Press Mis.
<i>SB. 54</i> Dated <i>27-1-</i> 19 <i>53</i>	

Not to be folded or roughly handled

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Fort Saint George, Public Works Consultation of 2nd February 1858.

No. 53. Read the following letter from Captain H. YULE, Officiating Secretary to the Government of India; to H. FORBES, Esq., Acting Secretary to the Government of Fort Saint George, dated Fort William, the 12th January 1858, No. 152.

SIR,

I am directed by the Government of India, to request that the Right Honorable the Governor in Council will be good enough, if possible, to place the services of Colonel Arthur Cotton at their disposal for a short time, in view to his affording this Government and that of Bengal the benefit of his experience and advice as to the measures which it may be advisable to adopt for the regulation of the inundations and the embankments of the Cuttack rivers.

2. The question is closely allied to some of those which have been the subject of Colonel Cotton's attention and exertions in the public service for many years; and it seems to the Governor General in Council but reasonable on so important and special a question to seek the benefit of that experience which has been required in fields most nearly similar.

3. Printed papers on a part of this subject have already been transmitted to the Government of Fort Saint George by the Bengal Government on the 7th September last, and a considerable mass of additional data which has not yet been submitted to Government has been collected by Captain J. C. Harris of the Bengal Engineers.

4. The accompanying copy of a letter of this date to the Government of Bengal will assist in conveying a general idea of the present state of the case.

5. Should Colonel Cotton's services be available it will be desirable that he should not long delay his journey to Cuttack, visiting this Presidency either before or afterwards as may be most convenient to himself.

Letter from Captain H. YULE, Officiating Secretary to the Government of India; to A. R. YOUNG, Esq., Secretary to the Government of Bengal, dated Council Chamber, the 12th January 1858, No. 151.

SIR,

The papers regarding the rivers and embankments of Cuttack which accompanied your letter No. 2968 of 15th December, having been laid before the Right Honorable the Governor General in Council, together with the reports on parts of the same subject by Captains Beadle, Harris and Short, which were printed last year, I am directed by His Lordship to communicate the following observations and orders.

2. The injury apprehended or experienced from the floods, is 1st to the Town of Cuttack, the very existence of which is annually threatened; 2nd, to the lands of Central and Southern Cuttack generally from the constant breaches in the very imperfect embankments.

3. The former matter was the Chief subject of the reports already printed. Various proposals were made by the Officers who wrote them, differing in the exact manner, but all agreeing in recommending heavy works for the regulation of the waters which divide at Cuttack into the two branches Mahanuddee and Kajooree. To the growing aggrandisement of the latter at the expense of the former, they attribute not only the danger to Cuttack City (about which it is presumed there can be no doubt) but also the great damage done from breach and topping of embankments in Pooree District.

4. It appears however to have been generally assumed by those Officers that both evils might be remedied in whole or in part by the establishment of such regulating works as have been proposed, and that with these might be combined a scheme of irrigation and perhaps of navigation analogous to those now in progress in the great Coromandel Deltas.

5. Captain Harris the Executive Engineer of Cuttack embankments, was in the beginning of last year relieved from his duties in order that he might devote his whole time to the investigation of this subject. His first results were printed in the publication already spoken of. But that embraced only a small portion of the subject. Before he had completed his work he was unluckily called away (in July last) for special duty in the Central Provinces. There is no distinct information as to what he had done up to that date, but he had, it is believed, collected a mass of levels and other data. He is now under orders to return to his Civil employment.

6. In the papers now sent up Captain Young, the Officiating Chief Engineer throws doubts on the efficacy of any such regulating scheme as has been proposed, because the floods in the Mahanuddee (he says) are as destructive as those in the Kajoorree; throws doubts on the success of any irrigation scheme and suggests, apparently as the best thing that can be done, to sweep away the embankments and let the rivers take their will.

7. That the floods in the Mahanuddee are as destructive as those of the Kajoorree seems improbable when it is observed that the remissions on account of inundation in Cuttack district have in the last quarter century amounted to only Rupees seven thousand, six hundred and ninety-five, whilst those in Pooree have amounted to Rupees three lacs, thirty-one thousand, three hundred and three.

8. That irrigation would have some chance of being profitable is shewn by the fact that remissions on account of draught in Cuttack district amounted in the same period to Rupees twelve lacs, twenty-seven thousand, and seventy-five, and in Pooree district to Rupees four lacs, forty-nine thousand, two hundred and sixty-one.

9. That the only practicable course is to throw down the embankments and let the rivers work their will may be established as it was considered to be established in the case of the Damooda after years of careful investigation and thought. But that such a trenchant solution of the difficulty should be adopted before any proof has been brought forward of the impracticability of scientific regulation, and when it is known that the existing embankments have been made at Haphazard and without any general plan by former native authorities or on the merest local requirements, would be a heavy discredit to this Department.

10. It appears to the Governor General in Council that orders on the General and permanent measures to be adopted cannot be given without extreme rashness until much fuller data are collected, or are submitted, if they have been collected.

11. What is now wanted is the adoption of such measures as will alleviate or stave off threatening evils, until the data for a full judgment on the case may be available.

12. The Governor General in Council would direct then that in the mean time the existing embankments should be repaired with as much judgment and efficiency as may be possible; that all that the experience of the embankment Officers can suggest in the use of brushwood, rough stone, and such expedients, for the protection of the revetment walls of the city of Cuttack, be done at once, and that the former orders* for the preparation of quarry material be carried out.

* No. 2046 of 12th Oct. 1855.

13. Captain Harris should in the meanwhile complete his data, especially with reference to the capacity of the Mahanuddee and its off shoots, and to a general scheme of improved embankments.

14. At the same time it seems but rational, on so important and special a question, to seek for that experience which has been acquired in circumstances most nearly allied. Having regard therefore to the great experience in more or less analogous operations, which has been enjoyed by several Officers of the Madras Corps of Engineers, the Governor General in Council has resolved to call on the Government of Madras to invite Colonel Arthur Cotton, or failing him, some other Officer of nearly similar experience to visit Cuttack after Captain Harris's return, and to give the Government of Bengal the benefit of his advice on the subject of the regulation of these rivers.

15. Since the preceding orders were drafted your Junior Secretary's letter No. 38 of the 7th Instant has been received; from which the Government of India is glad to learn that a part

of its instructions have been anticipated in the measures now taken for the present security of the city, by raising the revetment and protecting its foundations.

No. 54. ORDER THEREON, No. 171; dated 29th January 1858.

Resolved that a copy of the foregoing letter and of its enclosure be forwarded to Colonel Arthur Cotton, and that he be requested to proceed to Calcutta for the purpose of carrying out the wishes of the Government of India, as early as practicable, after the completion of the duty on which he is at present engaged with His Excellency the Commander-in-Chief.

2. Colonel Cotton will exercise his own discretion as to proceeding to Calcutta at once or visiting Cuttack on his way.

(Signed) H. FORBES,
Acting Secretary to Government.

No. 55. Ordered in consequence that the following letter be despatched.

From H. FORBES, Esq., Acting Secretary to the Government of Fort St. George; to Captain H. YULE, Officiating Secretary to the Government of India, D. P. W., dated 29th January 1858, No. 172.

SIR,

I have had the honor of submitting to the Right Honorable the Governor in Council your letter of the 12th January 1858, and I am directed to inform you in reply that Colonel Arthur Cotton has lately proceeded on a tour with the Commander-in-Chief, in order to plan, under His Excellency's instructions, defensive works for the Arsenals and Magazines in the Cantonnments of Bangalore, Bellary, and Kurnool.

2. A Telegraphic despatch from Sir Patrick Grant has informed the Government that the duty on which Colonel Cotton is engaged will be completed within a fortnight from this date, and he has been directed then immediately to proceed to Calcutta and place his services at the disposal of the Government of India.

From

Captain H. Gule,
Offg. Secretary to the Govt of India,

To

A. R. Young, Esquire,
Secretary to the Govt of Bengal.

Dated the 12th January 1858
N. 151

Pub. Works Dept. Sir,

Public

The papers regarding the rivers and embankments of Cuttack which accompanied your letter of 29th 58 of 15th December having been laid before the Right Honble the Governor General in Council, together with the reports on parts of the same subject by Captains Beadle, Harris and Short, which were printed last year, I am directed by His Lordship to communicate the following observations and orders:-

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3 The former matter was the chief subject

subject of the reports already printed. Various proposals were made by the Officers who wrote them, differing in the exact manner, but all agreeing in recommending heavy works for the regulation of the waters which divide at Cuttack into the two branches Mahanuddee and Rajoree. To the growing aggrandisement of the latter at the expense of the former, they attribute not only the danger to Cuttack City (about which it is presumed there can be no doubt), but also the great damage done from breach and topping of embankments in Boosee district.

4 It appears however to have been generally assumed by those officers that both evils might be remedied in whole or in part by the establishment of such regulating works as have been proposed, and that with these might be combined a scheme of irrigation and perhaps of navigation analogous to those now in progress in the great Hindoo Delhas.

5 Captain Harris the Executive Engineer of Cuttack embankments, was in the beginning of last year relieved from his duties in order that he might devote

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his whole time to the investigation of this subject. His first results were printed in the publication already spoken of. But that embraced only a small portion of the subject. Before he had completed his work he was unluckily called away in July last, for special duty in the Central Provinces. There is no distinct information as to what he had done up to that date, but he had, it is believed, collected a mass of levels and other data. He is now under orders to return to his civil employment.

6 In the papers now sent up Capt. Young, the Offg. Chief Engineer, throws doubt on the efficacy of any such regulating scheme as has been proposed, because the floods in the Mahanuddee he says are as destructive as those in the Rajoree; throws doubt on the success of any irrigation scheme and suggests, apparently as the best thing that can be done, to sweep away the embankments and let the rivers take their will.

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in

in Cuttack district have in the last quarter century amounted to only Rupees seven thousand, Rs 7,695 six hundred and ninety five whilst those in Pooree have amounted to Rupees Three Lacs, Rs 3,1,305 thirty one thousand three hundred and three

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9 That the only practicable course is to throw down the embankments and let the rivers work their will may be established as it was considered to be established in the case of the Damooda after years of careful investigation and thought. But that such a trenchant solution of the difficulty should be adopted before any proof has been brought forward of the impracticability of scientific regulation, and when it is known that the existing embankments have been made at haphazard and without any general plan by former native authorities or on the mere local requirements

requirements would be a heavy discredit to this Department. - 9+

10 It appears to the Governor General in Council that orders on the general and permanent measures to be adopted cannot be given without extreme rashness until much fuller data are collected, or are submitted if they have been collected. -

11 What is now wanted is the adoption of such measures as will alleviate or stave off threatening evils, until the data for a full judgment on the case may be available

12 The Governor General in Council would direct then that in the meantime the existing embankments should be repaired with as much judgment and efficiency as may be possible; that all that the experience of the embankment officers can suggest in the use of brushwood, rough stone, and such expedients for the protection of the riverment walls of the city of Cuttack, be done at once and that the former orders for the preparation of quarry material be carried out. -

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embankments.

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tional, on so important and special a question,
to seek for that experience which has been
acquired in circumstances most nearly allied.
Having regard therefore to the great experience
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has been enjoyed by several officers of the
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General in Council has resolved to call on
the Government of Madras to invite
Colonel Arthur Cotton, or failing him, some
officer of nearly similar experience

to visit Cuttack after Captain Harris's re-
turn, and to give the Govt. of Bengal the benefit of
his advice on the subject of the regulation of these rivers.

Since the preceding orders were drafted your
Junior Secretary's letter N. 38 of the 7th instant has been
received, from which the Govt. of India is glad to
learn that a part of its instructions have been antici-
pated in the measures now taken for the present security
of the city, by raising the revetment and protecting its foundations.

Council Chamber }
The 12th Jan'y 1858 }
True Copy

Have the honor to be,
Signed, H. Yule, Captain
Offg. Secy. to the Govt. of India

H. Yule

Offg. Secretary to the Govt. of India

MM/3/58

N. 152

From
Captain H. Yule,
Offg. Secretary to the Govt. of India,

To
H. Forbes Esquire,
Acting Secretary to the Government
Fort Saint George.

Dated the 12th January 1858

Public Works Dept.
Public

Sir I am directed by the
Government of India to request that the
Right Honble the Governor in Council will
be good enough, if possible, to place the
services of Colonel Arthur Cotton at
their disposal for a short time, in view
to his affording this Government and that
of Bengal the benefit of his experience and
advice as to the measures which it may
be advisable to adopt for the regulation
of the inundations and the embankments
of the Cuttack Rivers.

The question is closely allied to
some of those which have been the subject
of Colonel Cotton's attention and exertions
in the public service for many years, and
it seems to the Governor General in Council
but reasonable on so important and special

a question to seek the benefit of that experience
off which has been acquired in fields most nearly
ever similar.

14. 3 Printed papers on a part of
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to the Government of Fort Saint George by
the Bengal Government on the 7th September
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data which has not yet been submitted to
Government has been collected by Captain
J. C. Harris of the Bengal Engineers.

14. 4 The accompanying copy of a letter
of this date to the Government of Bengal will
assist in conveying a general idea of the present
state of the case.

5 I should Colonel Cotton's services
be available it will be desirable that he
should not long delay his journey to Cuttack,
visiting this Presidency either before or afterwards
as may be most convenient to himself.

I have the honor to be,
Sir,

Your most Obedient Servant,

Fort William,
The 12th January
1858

H. Mule
Off Secy to the Govt of India.

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6722

msa

No 171.

Extract from the Minutes of Consultation
Under date the 29th January 1858-

Read the following
^{Official}
letter from the Secretary
to the Govt of India in
the Department of
Public Works.

(Here inserted, 12 January 1858 No 152.)

Retained that a
copy of the foregoing
letter & of its enclosures
be forwarded to Colonel
Arthur Cotton, and
that he be requested
to proceed to Calcutta

At
W
M

Public Works
No 152
29th January 1858
No 171

James Alfred Johnston
to the Govt of India.

Dated 12th
November 1857

Received of the Secretary
to the Govt of India
the letter of the 29th January 1858
No 152
relating to the
proposed extension of the
line of the Great Indian
Peninsula Railway
from the station at
Madrass to the station
at Calcutta.

John A. Johnston
to the Govt of India
29th January 1858

No 53.

29th January 1858

for the benefit of
carrying out the
sister of the Govt. of
India, as early as
practicable after the
completion of the duty

which he is at present
engaged with Sir Exr.

The Comd. in Chief -

Colonel Cotton will
advise him on his return
as to proceeding to
Calcutta where he
will be well received on his
way.

H. J.

4 Copies to the Comd. in Chief
1 to Mr. Cotton - H. J.

of Copied
Pris. 30

P. W. D.
5V
No 172

Captain Gule
Off. Sec. to Gov. of India

in
I have had the honor of
submitting to Mr. W. H. Gule
your letter of the
and I am directed to
inform you in reply that
Colonel Arthur W. H. in
has lately proceeded on
a tour with the Comd. in
Chief, in order to plan,
under his Excl. instructi-
-ons, special work
for the archives and
magazines in the
announcements of

At
the
W. H.

On the 11th 1858
to the Comd. 22. February

1858

Extract of Memo. of Comd.
Date 29th Jan 1858.

Regarding Colonel
Arthur W. H. Gule
in accordance with the wishes
of the Government of India, for
carrying out the measures for the
regulation of the printing and
the publication of the
Colonel's Memoirs, after the complete
issue of the duty on which he is
at present engaged with the
Executive the Government is

Bansome & Bellamy, & Kinnaird.

A despatcher des.
Jahab Jinnah
Patrick Jinnah
informed the Govt. that
the duty on Thick Cotton
Cotton is engaged with
he enabled within a
fortnight from his
date, and he has
been directed to
immediately proceed
to Calcutta and place
in service at the
disposal of the Govt.
of India.

H. J.

Fort St. George
29th Sept 1858.

Public Works 1858. Rept.
Pt. 6. Ch. 2. February

Feb 192.

Of the
of the
Cost of India
Noted 29th Jan 1858.

Estimating that island
bottom has lately increased on a
tour with the Commander in chief
in order to plan under his rule;
large institutions, defensive
works for the present and
the future in the continent
of Bangalore (Bally) and the
road, and that he has been
ordered on the completion of the
work, to proceed to Calcutta, and
place his services at the disposal
of the Government of India.

1858

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