

(1) Number of pages \_\_\_\_\_

(2) Date of repair \_\_\_\_\_

(3) Initials of the Referencer \_\_\_\_\_

# MADRAS RECORD OFFICE

## Government of Madras

*Public Works*

DEPARTMENT

G.O. No.

2840

B.P. No.

Press

Mis.

Dated

2-10-4875

195

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,  
2nd October 1875.*

No. 35. Read the following letter from Colonel C. H. DICKENS, R.A., Secretary to the Government of India, Public Works Department, (Account—Irrigation,) to Major-General G. W. WALKER, R.E., Secretary to the Government of Madras, Public Works Department, dated Simla, 20th July 1875, No. 212 A. I. :—

I AM directed to acknowledge receipt of your letter, No. 1,223, dated 1st May 1875, furnishing explanation on certain points noticed by the Government of India in the orders on the Madras Irrigation Budget Estimate for 1875-76, and in reply to state as follows.

2. In respect to the provision of funds for the embankment of the Polavaram Island, I am to say that the papers forwarded with your letter under acknowledgment do not contain the information asked for by the Government of India of the amount of Government revenue dependent on the works. I am, therefore, to ask that a full report may be furnished on this point, and that it may be stated why the Inam holders should be exempted from paying a share of the cost of the works in proportion to the protection that will be afforded to their lands.

3. As regards the works of village drainage, I am to say that the Government of India is not perfectly satisfied that the outlay is one that should be entirely borne by Imperial Funds. The principle which it is considered should govern the adjustment of the charge is laid down in the

\* No. 340 I., dated 26th May 1874. accompanying copy of a letter\* to the Government, North-western Provinces, and I am to ask whether there is any objection to the outlay in the present case being regulated accordingly, and to Local Funds being required to provide for such portion of the cost as may be due to other causes than the effects of irrigation works.

4. The outlay on these works of drainage is one that is causing some attention, and the question has been raised whether the cost of drainage rendered necessary by the rise of the spring level due to constant irrigation should be charged to irrigation. If this is done, then there will be reason to apprehend that the Capital Account of the works will be weighted with an amount not contemplated when the works were undertaken, and this may have the effect of materially reducing the percentage of the returns.

5. Under these circumstances, the question suggests itself whether it would not be more economical and preferable in a sanitary point of view to reduce the supply of full irrigation to smaller proportions of the irrigable area in any one locality, and thus admit of irrigation being extended to a greater number of villages. This would probably be the means of preventing the water-logging of the soil which forms the subject of complaints. This water-logging is understood in many instances to be due in great measure to over-irrigation and obstruction of the surface drainage by the net work of private field channels, and if this be so, it is scarcely legitimate to debit the Capital Account of the canal with the cost of providing for the drainage works.

6. Where the canal channel obstructs the natural drainage outfalls, the cost of proper passages for such drainage will probably be found to be finally debitable to the canal. But the outlay on such works is but a small portion of the whole cost of draining a water-logged tract.

*Proceedings of the Madras Government, Public Works Department,  
2nd October 1875.*

7. The whole question of the incidence of the charge is one that has to be considered and definitely settled, and in view to aid in a decision, the Governor-General in Council would be glad to receive the opinion of the Government of Madras in the matter.

Copy of a letter, No. 340 I., dated 26th May 1874, from the Government of India, Public Works Department, to the Joint Secretary to the Government of the North-western Provinces in the Public Works Department, Irrigation Branch.

I AM directed to acknowledge the receipt of the Resolution of His Honor the Lieutenant-Governor, No. 333 W., dated the 6th ultimo, on drainage operations, undertaken and proposed by the Irrigation Department in the North-western Provinces, and in the last paragraph of which it is stated that a regular allowance of a lakh of Rupees per annum in the Ordinary Budget for the next ten years to carry out such works would produce excellent results.

2. In reply, I am to remind the Local Governments of the orders on this subject communicated in letter from this office, No. 368 I., dated the 3rd September 1870, and to repeat that the Governor-General in Council is disposed to afford every encouragement for the prosecution of these works. For the current year the Budget provision for the purpose appears sufficient, and, if not, additional funds might be appropriated from the extra grant of two lakhs allotted under Irrigation, Ordinary, in the Budget Orders.

3. I am, however, as before, to direct special attention to the classification of projects for drainage. His Excellency in Council considers that, in cases where drainage works are necessary to rectify damage due to obstructions or over-saturation of the soil from canals of irrigation, the necessary outlay is fairly chargeable to the Canal Capital Account under Ordinary or Extraordinary, according to circumstances.

2ndly.—When, in addition to sanitary advantages, the drainage operations may lead to the reclamation of land for cultivation, and so fall into the class of profitable investments of funds, the outlay might be Imperial if the Government land revenue were chiefly concerned, or arranged in some manner by a local Act if chiefly beneficial to private property.

3rdly.—When the advantage is wholly or chiefly sanitary, Local or Provincial Funds shall bear the burden. Other cases, I am to add, may arise, but these three classes of projects obviously require different treatment financially.

No. 35-A. Minute by the Honorable the Governor.  
(Here enter dated 23th September 1875.)

No. 35-B. Minute by the Honorable R. S. ELLIS, C.B.  
(Here enter dated 16th September 1875.)

No. 35-C. Minute by the Honorable W. HUDLESTON.  
(Here enter dated 18th September 1875.)

No. 36. ORDER THEREON, 2nd October 1875, No. 2,840.

IRRIGATION, No. 5.

Account.

No. 1,833, dated 1st July 1875.

2. The question raised regarding the obligation of holders of Inam lands to contribute to the Polavaram Island Embankments will be referred for consideration

*Proceedings of the Madras Government, Public Works Department,  
2nd October 1875.*

in the Revenue Department. It may be noticed that when the shares of the cost of constructing the embankments payable by Government and the Zemindars respectively was settled in Proceedings, Madras Government, No. 477, of the 25th February 1874, Government and Inam lands were added together to make up the area on which the former share was based, and that, moreover, in the absence of exact information as to the areas within the embankments the gross areas were taken as the basis of the calculation. In the Board of Revenue Proceedings printed in Proceedings, Madras Government, 1st July 1875, No. 1,833, the areas of Government lands within and without the embankment are given, but information is still wanting as to the extent and situation of Inam lands.

3. The consideration of the subject of the provision of funds other than Imperial for the cost of such village drainage in the deltas as has not been rendered necessary by the irrigation works will be remitted to the Financial Department, with a copy of the letter, No. 340 I., of the 26th May 1874, to the Government, North-west Provinces.

4. The Government desire to have before them the fullest information which may be obtainable as to the extent to which the necessity for drainage in general and for the drainage of the villages in the Godavery Delta is due to natural and artificial causes respectively, or, in other words, how far the need of drainage has resulted from the fact that the villages are in the delta, with necessarily but imperfect natural means of drainage, and how far from the introduction of an artificial water-supply for irrigation purposes. It is believed that the investigations which have recently been made under the District Engineer's orders for draining different groups of villages will throw considerable light on this subject, and that officer will accordingly report his views. These Proceedings will also be communicated to the Revenue Department and to the Board of Revenue, with a view to the opinions of the Collectors and experienced inhabitants not only of the Godavery, but of other irrigated districts being obtained. The Sanitary Commissioner will likewise report fully on the subject.

5. Special attention should be given to the views of the Government of India on the subject of the incidence of charges for drainage works as conveyed in the copy of the letter, No. 340 I., dated 26th May 1874, to the Government of the North-west Provinces printed in the Proceedings.

(True Extract.)

Major-General, R.E.,  
Secretary to Government.

To the Financial Department.

" Revenue  
" Board of Revenue.  
" Chief Engineer for Irrigation.  
" District Engineer, Godavery.  
" Sanitary Commissioner.

Exd. S. T. Austin.

Spare Copies

GOVERNMENT OF INDIA  
PUBLIC WORKS DEPARTMENT.

ACCOUNT.  
Irrigation.

To  
THE SECRETARY TO THE GOVERNMENT OF  
MADRAS, IN THE PUBLIC WORKS DEPART-  
MENT.

No. 212 A-I.

Dated SIMLA, July 20, 1875.

Received

E. I. M.

G.O. 2840 - 2.10.75

Communicates remarks in reply to  
Madras Irrigation Budget Orders for  
1875-76, and asks for information as to why  
Inamholders should not pay for the pro-  
tection afforded to their lands by the em-  
bankment of the Polavaram Island, and  
whether some portion of the outlay in vil-  
lage drainage works should not be borne by  
Local funds.

G.O. No 2840 - 2.10.75

Public Works Dept.

Proceedings of the Madras Government  
Under date the  
Read the following

From  
The Govt of India (No. 212 A-I of 20th July 1875)

The Honble the  
Governor in Council  
observes that the infor-  
mation referred to in  
para 2 of the foregoing  
letter from the Govt of  
India has been furnish-  
ed in the letter as per  
margin.

Polavaram island  
embankments

No. 1833 of 1st July.

2. The consideration  
of the subject of the  
present



respects, apart from  
the greater security of  
the crops due to irrigation,  
the condition of the Delta  
villages has been much  
improved, particularly  
as respects almost entire  
freedom from inundation  
by the river, but as has  
been before pointed out  
the natural circumstances  
of Deltaic tracts render  
drainage specially neces-  
sary. The general drainage  
has been already pro-  
vided for on, if not a  
complete, a sufficiently  
large scale to afford  
data for ascertaining  
in the course of a few  
years

Drainage has been improved & the  
land is better

Drainage

Drainage

years what the real  
requirements are. Village  
drainage is not for the  
relief of the arable  
lands of the village,  
but for making the  
ground occupied by  
villages as dry and  
healthy as may be  
practicable.

by 12/8

PUBLIC WORKS DEPARTMENT.

Memorandum

The remark of the Hon<sup>ble</sup> Mr. Harlston, in the margin of the revised draft order on the letter no. 2 A. J. of the 20 July 1875 from the Government of India, that <sup>the</sup> drainage of the Godavari Delta, has not been concurred with the extension of irrigation been sufficiently improved, & the remark suggests that this has been done, was probably written under a misapprehension of the facts.

Drainage was certainly neglected or looked upon as comparatively insignificant in the first instance, and until comparatively recently

no considerable outlay thereon was proposed.

In the Completion estimates of the Eastern & Western

Deltas of the Godavari, sanctioned in 1871, however

provision to the extent of several lakhs of Rupees

was made for drainage, and with this money

my now colleagues

The remark of the Hon<sup>ble</sup> Mr. Thurston, in  
 the margin of the revised draft order on the  
 letter no. 2 A. I. of the 20 July 1875 from the  
 Government of India, that the drainage of the  
 Godavari Delta has not been concurrently  
 with the extension of irrigation been sufficiently  
 improved, & that someone suggests that this has  
 been done, was probably written under a mis-  
 apprehension of the facts.

Drainage was certainly neglected or looked upon  
 as comparatively unimportant in the first  
 instance, and until comparatively recently  
 no considerable outlay thereon was provided.  
 In the completion estimates of the Eastern & Western  
 Delta of the Godavari, sanctioned in 1871, however,  
 provision to the extent of several lakhs of Rupees  
 was made for drainage, and with this money

902 October 75  
 142840

A great deal has been accomplished

This work may be called the main drainage of the Delta, as it will effect the comparatively rapid relief of the lands from water which formerly remained upon them for a very considerable time.

The drainage of the Delta and the adjacent Delta of the Krishna was a problem presenting some difficulties, and preliminary work has to consider these, and to determine the arrangements to be carried out, I have obtained some knowledge of the circumstances.

The water to be got rid of is certainly principally that due to rainfall, but that derived from the artificial supply introduced for irrigation. For the latter very small drains would suffice, but the former it has been found useful to cut drains of very great capacity.

It has not yet been ascertained conclusively what capacity the drains must ultimately have, but the general principle adopted in this is a certain amount

of rainfall within a given period has been assumed as probable, and it has further been supposed that if this can be got rid of within a limited period (6 days) no material harm will be done by the flood water. Where the canals have works for disposing of surplus, the quantities so discharged have been provided for in addition to the drainage due to rainfall.

In designing the drains a certain calculated flood level was fixed, and in those drains which have been already materially enlarged & improved, actual flood levels have been recorded, and the results exhibited have been examined with a view to determine what further improvements would be necessary.

In the Eastern Delta the drains which have already had a considerable effect in improving the country are the Biccarole & Jooliabaga, while the still more important Lake has more

902 October 1915  
12840

recently been for many miles been transformed  
from a mere ditch, altogether inadequate to fit  
rich rainfall drainage, into a flat drain, &  
as floor levels were noted under the old state of  
things, it will be possible to note also accurately  
during the current year the effect of the improvements.

Similarly in the Western Delta numerous drains  
have been cut, and a marked improvement  
in many parts of that extensive tract of country  
has been the result. This is especially the case  
near the Weyburn & on the borders of the Coler lake  
where much swamp land has been drained  
& brought under cultivation. Here also floor levels  
are being carefully recorded & deductions made  
from the data thus obtained.

No doubt a good deal of subsidiary work has still  
have to be done in the future to relieve particular  
localities, but the first thing to be accomplished

was to provide a free outfall for the  
great body of water which in heavy seasons  
of considerable local rainfall submerges the  
country in all directions, damaging or  
destroying crops, or rendering much land  
unsuitable for cultivation.

While it may readily be admitted that there  
is still plenty of room for improvement in the  
drainage arrangements, it is believed that  
these two subdivisions of the Delta are better  
off in this respect now than they ever were before.  
In the next place the data on which these  
arrangements have been based show very  
clearly that rainfall, combined with the  
hydrographical difficulties presented by the Delta  
lands to effective drainage, is the cause of  
the present drainage work, having been found  
necessary, and that all these troubles from the

902 October 75  
#2840

State canals would have been capable  
of being got rid of by comparatively better  
works.

A part of the cost of general or main drainage  
is fairly chargeable against the delta works; so is  
all special drainage rendered necessary by the  
construction of the canals and their distributaries.  
While many minor drains, after disposal of  
surplus from fields will no doubt have to be cut  
with funds provided under estimates for the  
irrigation works. If however the Capital accounts  
of the delta works are to be in any sense a true  
statement of what these works have or will cost,  
it would appear to be very necessary to distinguish  
between outlay on drainage with which these  
works have really no concern, & that which  
is due to the introduction of an artificial

supply which at times may be in excess of  
the requirements of the cultivation. - If this  
distinction be attended to, it will be found,  
it is believed, that already a great deal  
of expenditure in excess of the proper share  
of the delta works for drainage has been  
debited against them.

It has also to be remembered that the  
principle which is to govern the charge for  
drainage works is not conveniently deter-  
minable on the special considerations due  
to the degree of success which may have attended  
the construction of the existing delta works.

This problem as regards drainage presented  
by the existing delta will shortly have to be  
solved. Then the cost of drainage will be  
very much greater owing to the less favorable

1840

Dr. Knight report for 71.  
Shows that out of 14.9 deaths  
per 1000. from all causes.  
7.92 are due to fever.  
and he pointed out that this  
mortality has been a considerable  
hostility from secondary diseases  
induced by fever. In the same order  
this leads.

I am more inclined to  
assign to the fever, in my  
books the primary cause of  
the fever diseases in that  
part. All that I maintain  
is that the inadequate books  
for diagnosis have probably  
sincerely exaggerated the  
original cause.

The facts remain that the  
mortality from fever in this  
district is exceptionally  
great.

That so far as in form?  
is available it has  
greatly increased of late  
years. During this time  
also the migration has  
been extended lately.

That among irrigated  
districts - the Godavari  
is exceptionally distinguished  
by the prevalence of fever  
and as I understand,

16  
18.10  
I have lived in the Godavari  
District and know both its dry -  
malarious taluqs and the irrigated  
area - and I - in <sup>my</sup> simplicity in  
respect to the craft of sanitation  
should not have thought of comparing  
the two any more than I should  
draw sanitary inferences from  
differences or similarities between  
the health statistics in Wynad  
the Dalapant and the Coast Districts  
of Malabar and Canara. They  
seem to me to have climatic influences  
of their own - In fact I doubt whether  
it would be possible to "poison" (the  
a

G. A. D. October 18  
1880

a very exaggerated term) the Coast belongs  
on either side of the Peninsula up to the  
natural Standard of Malaria in  
the interior. Sanitary Authorities who  
standing, I would disconnect the two  
and merely treat of the tract which  
is brought before us in these papers.  
viz. the artificially irrigated area.

Medical Evidence shows that  
the Coast-lating fever is not of a serious  
or mortal type and it does not diminish  
the population although it temporarily  
debilitates a considerable proportion. But  
the question, as it appears to me, is

- (1) Has the prevalence of fever increased  
since the water flooded the country?

(2) Is the proportion of sickness or  
death from fever excessive?

I fancy that both questions  
are to be answered in the affirmative  
and in that case I fear that the cause must  
be Saturation & rise in the Spring-level of  
the Country. If either disadvantage has  
occurred the results are chargeable to  
works. I believe that the question is  
rather general (like the irrigation) than  
Special and a Village question, and that  
in the details we can scarcely separate  
the two.

The Government of India letter  
is thoroughly fair and I would go into  
the investigation required. But the fact is

is that there is very little analogy  
between the N. W. Province Canals and  
their effect on health - and their returns  
and our Delta system of irrigation  
and the returns which are being realized  
- returns sufficient to cover the cost  
of large outlay or work of both irrigation  
and drainage.

28/9

W. V. Bruce

90-20-20-20-20  
2/2/20

16 P. 12

The Madras Govt. have  
begun them for solution  
the question of the extent  
to which the drainage  
of the villages in the Godavari  
delta should proceed, and  
in what proportion their  
works should become  
a charge against the  
Irrigation works or  
against local &  
Provincial funds.  
My hon<sup>ble</sup> Colleagues

in their notes recorded on  
the draft Proceedings,  
to which these remarks  
are appended, would  
seem to accept as an  
established fact that  
the fever which prevails in  
the Godavari Delta  
is immediately connected  
with the State Irrigation  
works and they  
logically accept the  
responsibility of applying the remedial  
measure of draining  
the villages of the  
Delta in which the  
fever has prevailed.

I venture to ask, before any  
practical effect is given to this  
conclusion that my colleagues  
will permit me to point  
out that:

1<sup>st</sup> That the fever which  
prevails in the Godavari  
Delta is not of the grave  
character which was supposed.

2<sup>nd</sup> That the most careful  
observation of the district,  
in question, by two most  
competent Professional men

Dr. Cornish & Wright has  
failed to connect <sup>this fever</sup> directly  
these fevers with the

State Irrigation works.

The fever is described by  
Dr. Wright as an acute of  
a simple and uncomplicated  
kind, yielding readily to treatment,  
so much so that Dr. Wright  
could not hear of a single

any single determining cause.  
Dr Wright is disposed to attribute  
it partly to the bad quality  
of the water in the wells, &  
to the insanitary condition  
of the streets and house drains  
of the villages and to exposure  
to cold <sup>during</sup> the North East  
monsoon.

The natives attribute the fever  
to bad drainage, bad  
drinking water exposure to  
cold, night dews and wind  
heavy rainfall, excessive  
irrigation & the practice  
of eating new rice.

Practically however the  
delta Taluqs which consist  
for the most part of irrigated  
land, show less mortality  
from fever than the dry  
Taluqs.

Taking the averages of the  
five years ending 1870  
we find the mortality of  
the Godavari district as  
noted in the margin

|                                                               |               |
|---------------------------------------------------------------|---------------|
| In the Irrigated<br>Taluqs.                                   | 8.12 per 1000 |
| In Zemindar estates<br>on the sea board &<br>mostly irrigated | 8.5 —         |
| In non irrigated<br>Taluqs above the<br>Delta.                | 11.5 —        |

14 15

was under review 71-72

During the ~~present~~ <sup>past</sup> year (72) the  
irrigated Taluqs show a mortality  
of 5.9 per 1000 which the  
death rate in the non-irrigated  
Taluq is as high as 9.15  
per 1000.

Dr Wright concludes. "There  
is to my mind no evidence  
that artificial irrigation is  
productive of fever."  
Dr. Formish points out that  
malaria is not usually  
the result of irrigation on  
the sea board of the Peninsula  
whatever it might be elsewhere  
and he instances the Krishna  
Wells, Madras, Tanjore  
and Tirunelveli. The Godavari  
is therefore an exception to  
the generally healthy condition  
of the irrigated sea board  
and the reason of this  
exception Dr. Formish  
considers to be, that  
during the North East

with the arrival of the N. E. monsoon  
& with increased cold & wet  
as in other parts of India. -

It is shown that whatever may be  
the cause of fever in the  
irrigated tract of the country,  
it prevails with marked  
correspondence in the non  
irrigated Taluqs also,  
and that whatever the  
causes they are general  
to the whole district and  
not confined to the  
localities where the drainage  
was naturally bad. -

I think that a careful con-  
sideration of the result  
of this scientific & prolonged  
enquiry will prevent any  
one dogmatically <sup>asserting</sup> ~~declaring~~  
that the fever in the Godavari  
delta is caused directly  
by the State Irrigation  
works.

21 17  
or that remedial measures,  
if generally adopted, are  
fairly chargeable to the  
Capital account of those  
works. -

No doubt in some cases  
these works have directly  
obstructed the drainage  
outfall of the villages  
and in these cases there  
can be no doubt that  
the cost should fall on  
Imperial funds; but  
I do not think that  
these cases will be found  
very numerous. -  
Col. Mullins the Chief  
Engineer for Irrigation  
writing in 1874 recorded  
as the result of his  
examination of the  
delta tract that it was

5  
than they would have been  
if no amicable works had  
been constructed and villages  
in the upland Taluqs are  
quite as much entitled  
to be drained as the works  
of the state as they are.

The remaining two villages  
are so closely surrounded  
by irrigation and  
the natural drainage  
is so obstructed that  
in their case some  
drainage works are  
necessary & the cost  
is fairly chargeable  
to Imperial Funds.

The object I have had  
in view in recording  
these remarks is to  
induce my colleagues  
to correct the impression  
that seems to prevail

23 17  
as to the gravity of the  
fever prevailing periodically  
in the Godavery district  
and as to the urgent  
necessity of costly remedial  
measures. and to make  
them hesitate in attributing  
this fever to the irrigation  
works.

In so far as those works  
have obstructed village  
drainage. I willingly  
concur that in justice  
a speedy remedy should  
be applied - and I would  
gladly see improved  
sanitary improvements  
introduced in the villages  
of the Delta generally.  
But there is hardly  
a district in the Presidency

which  
has not the same require-  
ments, and there seems  
a <sup>very</sup> good reason for  
treating this trust preferentially  
in the assignment of  
funds.

But if sanitary works  
on a large scale are ~~to~~  
~~considered necessary~~ it is  
unfair to attribute to  
the Irrigation works of  
the Delta; this necessity  
or to make them a  
charge against the  
Capital account  
of that work.

R. S. Ellis  
Sept. 16<sup>th</sup> 75

CG-2<sup>nd</sup> October 75

No 2840

Enclosure referred to P.N.D. No 212 A. I. 20 July 1875.

Copy of a letter No 340 I, dated 26<sup>th</sup> May 1874, from the Government of India, Public Works Department, to the Joint Secretary to the Government of the North Western Provinces, in the Public Works Department, Irrigation Branch.

I am directed to acknowledge the receipt of the Resolution of His Honor the Lieutenant Governor, No 333 W, dated the 6<sup>th</sup> ultimo, on drainage operations undertaken and proposed by the Irrigation Department in the North Western Provinces, and in the last para of which it is stated that a regular allowance of a lakh of rupees per annum in the Ordinary Budget for the next ten years to carry out such works would produce excellent results.

2. In reply, I am to remind the Local Government of the orders on this subject communicated in letter from this Office, No 368 I, dated the 3<sup>rd</sup> September 1870, and to repeat that the Governor General in Council is disposed to afford every encouragement for the prosecution of these works. For the current year the Budget provision for the purpose appears sufficient.

sufficient, and if not, additional funds might be appropriated from the extra grant of two lakhs allotted under Irrigation, Ordinary, in the Budget Orders.

3. I am, however, as before, to direct special attention to the classification of projects for drainage. His Excellency in Council considers that, in cases where drainage works are necessary to rectify damage due to obstructions or over-saturation of the soil from canals of irrigation, the necessary outlay is fairly chargeable to the Canal Capital Account under Ordinary or Extraordinary according to circumstances.

2<sup>ndly</sup>. — When, in addition to sanitary advantages, the drainage operations may lead to the reclamation of land for cultivation, and so fall into the class of profitable investments of funds, the outlay might be Imperial if the Government land-revenue were chiefly concerned, or arranged in some manner by a local Act if chiefly beneficial to private property.

3<sup>rdly</sup>. — When the advantage is wholly or chiefly sanitary, Local or Provincial funds shall bear the burden. Other cases, I am to add, may arise, but these three classes of projects obviously require

require different treatment financially.

Public Works Dept.

No. 2840

Proceedings of the Madras Government

Under date the 2<sup>d</sup> Oct. 1875  
Read the following

Printed in the only

and the same to be read

from

The Govt of India (No. 212 A.S. of 20th July 75)

Minute by the Honble the Commr (dated 28 Sept 1875)

do do R. S. Ellis C.B. (do do 16 do do)

do do K. Hindleston (do do 18 do do)

Ms 2840/75

see Minute

MS 2840

The Honble

the Governor in Council

observes that the in-

formation referred to in

the first part of para-

2 of the foregoing letter

from the Govt of India

has been furnished in

the

CO-22 October 75

2840

There are very completely given the  
from papers & such the following  
as supporting any impression that  
information of the said was in  
artificial view of one large scale  
has aggravated the disease

Popular opinion from the  
inadequate from consequently the  
the Government of the other two prominent

The question raised regarding the obligation of holders of Inam lands to contribute to the Polavaram island embankments will be referred for consideration in the Revenue Dept. It may be noticed that when the shares of the cost of constructing the embankments payable by Govt. and the Zemindars respectively was settled in Pro. Madras Govt. No. 477 of the 25<sup>th</sup> Feb. 1874, Govt. and Inam lands were added together to make up the area on which the former share

[illegible]

801-M. A. Adm. Bldg. 11-11-40

3.3. The consideration  
of the subject of the  
provision

provision of funds  
other than Imperial  
for the cost of such  
village drainage in the  
Deltas as has not been  
rendered necessary by the  
irrigation work will be  
remitted to the Financial  
Dept. with a copy of the  
letter No. 340 J of the  
20<sup>th</sup> May 1874 to the  
Govt. North West Province.

3. The Govt desire  
to have before them the  
fullest information which  
may be obtainable as  
to the extent to which  
the necessity for the  
drainage of the villages  
in the Godavary Delta

Godavary  
The consideration of the important  
observations of the Govt of J  
contained in Paras 2 & 4 of  
this letter

would keep as drafted  
M  
by L.R.

The Govt of letter is a very  
fair one & shows the whole subject  
from a consideration - They certainly  
are very nearly satisfied of the great  
truth that we cannot flood a country  
with impunity while we neglect to  
provide an outlet for a drainage  
system & it is much clear the  
mind of fallacies of this kind -  
And the fact will still remain that  
the profits of well managed irri-  
gation-cum drainage will pay  
the interest of the outlay on both  
what if the profits of the Godavary  
have to be halved & cover the cost  
of drainage needed to preserve  
health & life, the investment will  
be good - we have a large surplus  
here & kept with a most most  
separate something which be clear  
& call upon drainage from the  
order now the taken of the Govt

drainage in general & of

keep

is due to natural & not  
artificial causes & perfectly  
or in other words, because  
the need of drainage  
has resulted from the  
fact that the villages  
are in the Delta with  
necessity but imperfect  
natural means of drainage  
and how far from the  
introduction of an arti-  
ficial water supply  
for irrigation purposes  
It is believed that the  
investigations which  
have recently been made  
under the Dist. Engineer's  
orders for draining dif-  
ferent groups of villages  
will throw considerable  
light

light on this subject,  
 and that officer will  
 accordingly report his  
 views. These Progs. will  
 also be communicated  
 to the Revenue Dept. and  
 to the Board of Revenue  
 with a view to the  
 opinions of the collectors and experienced inhabitants  
 not only of the Godavary  
 but of other irrigated  
 Districts being obtained.  
 The Sanitary Commission  
 will likewise be con-  
 sulted.

4 - Special attention  
 should be given to the  
 views of the Govt. of India  
 on the subject of the  
 incidence of charges for  
 drainage work as conveyed  
 in

report fully on the subject

in the copy of the letter  
 N<sup>o</sup> 340 I dated 20<sup>th</sup>  
 May 1874 to the Govt.  
 of the N. West Province  
 printed in these Pro-  
 ceedings.

by 20/8

Engl. Dept. —  
 Rev. Dept. —  
 Bd of Revenue —  
 Ch. Secy. —  
 D. S. Kodarum —  
 Sanitary Commr. —  
 X. Att. —

7  
 12  
 5  
 3

Recd 17 with enclosure  
 20/8

Propd - 28-10-75