

(1) Number of pages 40(2) Date of repair 15.5.44

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.**Government of Madras.****DEPARTMENT.**

G.O. No.	<u>316-289-143</u>	Press Mis.
Dated	<u>15.5</u>	1871.

Not to be folded or roughly handled

No. 316. Read the following letter from the Superintending Engineer, 2nd Division, to the Chief Engineer for Irrigation, dated Camp at Kaligiri, 1st February 1871, No. 150:—

I HAVE the honour to enclose statements showing to the best of my ability
the information required in your Note,
2 Statements. No. 531-A 12th September 1870, called

for in G. O., No. 2,362, 30th September 1870.

2. The estimated acreage, etc., is copied from calculations made by the late Colonel Anderson, when District Engineer, Kistna, and Superintending Engineer.

3. The information mentioned in your paragraph 9 is, I believe, answered by the accompanying statement also prepared by Colonel Anderson. I have not yet been able to obtain any information by which I can fairly check his estimates, the quantity of Zemindary land irrigated and irrigable being unknown and not easily calculated, as, where the river or another district forms the boundary, we have no limiting line.

Statement showing the proposed capacity of the principal Irrigation Channels in the Kistna Delta.

	Bottom. width in feet.	Depth of water in feet.	Surface fall per mile.	Velocity in feet per second.	Discharge in Cubic yards per hour.	Probable acreage of cultivation.	
<i>Masulipatam Delta.</i>							
Main Channel	180	8	6"	2.7	540,000	270,000	
Canal to 8th mile	120-150	8-6½	5"	2.1	270,000	135,000	
Do. 8th to 11th mile	60	6	5"	1.9	88,000	(a) 44,000	
Do. 11th to Ellore	54	6.5	4"	.5	20,000	9,000	
Do. from Casarapully to Parikeed	30	5	7"	1.9	47,000	23,000	
Branch from Casarapully to Parikeed	20	6	6"	1.7	31,000	15,000	47,000
Budamairu Channel	100	6	7"	2.3	192,000	(b) 96,000	
Ryves' Channel to 7th mile	32	4	12"	2.3	51,000	25,000	
Branch 7th mile	75	6	7"	2.2	148,000	74,000	
Below 7th mile with Pullairu	65	6	7"	2.2	130,000	65,000	
At junction with Kankipaud	60	6	7"	2.2	120,000	60,000	
Pullairu at junction with Ryves' Channel	50	6	7"	2.1	99,000	49,000	
Do.							114,000
Pullairu below do.	110	6	7"	2.3	215,000	(c) 107,000	
Pamuru to Palarukodu	75	6	7"	2.2	148,000	74,000	
Do.	30	5	5"	1.6	40,000	20,000	
Polarukodu Channel	36	5	6"	1.8	52,000	26,000	
Butterodu	20	4	8"	1.9	26,000	12,500	
Butterodu Channel, Masulipatam Canal	20	4	8"	1.9	26,000	12,500	
Side Pullairu ... ..	.....	.....	.....	.....	.....	10,000	
Old Channels ... ..	.....	.....	.....	.....	.....	25,000	
Minor Channels	120-126	8½-7½	5"-6"	2.0-2.4	270,000	135,000	
Masulipatam Canal to 4th mile	60	7½-6	5"-6"	2	120,000	60,000	
Do. do. 4th to 13th mile ... ..	.....	.....	.....	.....	.....	60,000	
Pullairu as above	90	6	7"	2.2	174,000	(d) 87,000	60,000
Channel to eastern bank of Kistna							

Eastern Bank Channel	45	6	7"	2.1	90,000	45,000	87,000
Side Channel, Masulipatam Canal	42	6	7"	2.1	85,000	42,000	147,000
<i>Guntoor Delta.</i>							
Main Channel to 8th mile	196-230	8½-7	6"	2.1	470,000	230,000	
Western Bank Channel to Kollur	75	6½	6"	2.1	154,000	(f) 75,000	
Do. Kollur to Vellatur	60	6	7"	2.2	120,000	60,000	
Do. Vellatur to Iskapilly Channel	45	6	7"	2	84,000	43,000	
Do. Iskapilly Channel to Terminus.	30	6	7"	2	62,000	30,000	
Iskapilly Channel	30	.....	.....	.....	.....	.....	
Do.	30	.....	.....	.....	.....	.....	
Main Channel, 8th to 13th mile	180	6½-6	6"	2	320,000	(g) 160,000	75,000
East Side Channel, Nizampatam Canal	42	4½	10"	2.4	70,000	35,000	
West Side Channel, do.	24	4½	10"	2.2	41,000	20,000	
Commamore Channel to 8th mile	120	6	6"	2	206,000	(h) 103,000	158,000
Do. do. below 8th mile	100	6	6"	2	174,000	87,000	
Tungabudra ... ..	.....	.....	.....	.....	.....	16,000	
Commamore Channel at Garikapaud, 23rd mile	75	6	6"	2	133,000	66,000	
Opposite Baputla Tank	50	6	6"	2	94,000	47,000	
Between Baputla Tank and Terminus	50-30	6	6"	2	.....	.....	

BEZWADA,
6th January 1863.

(True Copy.)
(Signed) J. C. ANDERSON, Major, R. E.,
District Engineer, Kistna.
(Signed) F. J. MOBERLY, Colonel, R. E.,
Superintending Engineer, 2nd Division.

*Proceedings of the Madras Government, Public Works Department,
13th March 1871.*

Statement showing the expenditure incurred on works in connection with the Kistna Anicut Project from 1852 to 1869-70.

Name of Works.	Main Canals.	Distribu- tion Channels.	Total.
	RS.	RS.	RS.
EASTERN DELTA.			
<i>Ellore Branch.</i>			
Ellore Canal (proper)	1,80,187	2,191	1,82,378
Budamair Branch	14,353	9,980	24,333
	1,94,540	12,171	2,06,711
<i>Masulipatam Canal.</i>			
Masulipatam Canal (proper)	5,25,088	34,066	5,59,154
West Side Channel	38,683	433	39,116
	5,63,771	34,499	5,98,270
<i>Pullairu Branch.</i>			
Ryves' Canal	1,31,182	5,307	1,36,489
Gudewada branch	10,809	7,321	18,130
Pullairu (proper)	83,179	18,301	1,01,480
East Side Channel	27,744	30	27,774
Butterkodu	24	351	375
Buntumilly Channel	48,761	.....	48,761
Polerajukodu	12,686	9,653	22,339
Kalidindy branch	1,336	176	1,512
	3,15,721	41,139	3,56,860
Eastern Bank Channel	44,965	.....	44,965
Kistna embankment	35,518	.....	35,518
Drainages ... ..	.....	13,354	13,354
Portion of anicut expenditure	11,54,515	1,01,163	12,55,678
	.....	.....	3,99,727
	.....	.....	16,55,405
WESTERN DELTA.			
<i>Nizampatam Canal.</i>			
Nizampatam Canal (proper)	4,90,568	34,975	5,25,543
Eastern Side Channel	31,800	1,433	33,233
West do. do.	31,596	1,432	33,028
	5,53,964	37,840	5,91,804
<i>Western Bank Channel.</i>			
Western Bank Channel (proper)	1,60,613	19,165	1,79,778
Vellatur Channel	12,824	5,534	18,358
Iskapilly Channels	13,562	.....	13,562
	1,86,999	24,699	2,11,698
<i>Commamore Channel.</i>			
Commamore Channel (proper)	3,26,749	35,245	3,61,994
Tungabudra	2,953	6,263	9,216
	3,29,702	41,508	3,71,210

*Proceedings of the Madras Government, Public Works Department,
13th March 1871.*

Statement showing the expenditure incurred on works, etc.—(Concluded.)

Name of Works.	Main Canals.	Distribu- tion Channels.	Total.
	RS.	RS.	RS.
<i>Commamore Channel.—(Concluded.)</i>			
Southern High Level Canal	29,955	.....	29,955
River embankment	4,935	.....	4,935
Drainages	40,072	.....	40,072
	11,45,627	1,04,047	12,49,674
Portion of anicut expenditure ... ..	.....	.....	3,40,509
	.....	.....	15,80,183
Total Anicut Project...	.....	.....	32,35,588

Further expenditure required on sanctioned estimates.

	Estimate.	Expenditure up to 1869-70.	Balance.
	RS.	RS.	RS.
<i>Eastern Delta.</i>			
Upper Pullairu Project	1,83,100	98,859	84,241
West Side Channel of Masulipatam Canal	49,860	38,625	11,235
Widening head of Main Canal	20,080	13,324	6,756
Ryves' Canal Project	4,14,193	80,864	3,33,329
Lower Pullairu Project	1,04,650	1,03,412	638
River embankment	56,910	35,589	21,321
Kykalur Channel	6,130	5,886	244
	.....	.....	4,57,764
<i>Western Delta.</i>			
Side Channels of Nizampatam Canal	56,740	51,720	5,020
Commamore Channel Project... ..	1,95,770	1,74,089	21,681
Seetanagarum Main Canal	2,76,404	2,06,125	70,279
Drainage channel to dispose of four drainages, Rapully Talook.	10,460	9,412	1,048
	.....	.....	98,028

CAMP AT KALIGIRI,
1st February 1871.

(Signed) F. J. MOBERLY, Colonel, R.E.,
Superintending Engineer, 2nd Division.

Proceedings of the Madras Government, Public Works Department,
13th March 1871.

Kistna Anicut Project.

Delta Divisions.	Expenditure incurred up to 1869-70 including share of cost of anicut.	Further expenditure required on already sanctioned estimates.	Further expenditure required on estimates yet to be sanctioned.	Total computed expenditure for the completion of the project.	Average revenue and acreage prior to the construction of anicut.		Present acreage and revenue 1869-70, Fusly 1279.		Additional acreage and revenue.	
	RS.	RS.	RS.	RS.	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.
Eastern Delta	16,53,405	4,57,764	8,81,700	29,94,869	.....	54,445	63,928	3,29,537	2,06,072	8,24,288
Western do.	15,35,588	98,028	9,88,400	26,66,611	.....	71,575	64,305	3,05,491	1,65,605	6,62,420
Cost per acre ..	.....	.....	.....	56,61,480	.....	1,26,020	.....	6,35,028	.....	14,87,008
Deduct revenue before the anicut was brought into play ...	.....	.....	.....	11	.....	.....	.....	14,87,008	.....	.....
Deduct Repairs and Maintenance establishment, say ...	.....	.....	.....	.....	.....	.....	.....	21,22,036	.....	.....
Net Revenue...	.....	.....	.....	.....	.....	.....	.....	1,26,020	.....	.....
	.....	.....	.....	.....	.....	.....	.....	19,96,016	.....	.....
	.....	.....	.....	.....	.....	.....	.....	2,00,000	.....	.....
	.....	.....	.....	.....	.....	.....	.....	17,96,016	.....	.....

Profit 31.7 per cent. on Capital.

Proceedings of the Madras Government, Public Works Department,
13th March 1871.

No. 317.

ORDER THEREON, 13th March 1871, No. 742.

IRRIGATION, No. 21.

WITH this letter the Superintending Engineer, 2nd Division, forwards statements exhibiting, as far as can be

done at present, the information called for in G. O., No. 2,362, of the 30th September last. Colonel Moberly reports that the —

Expenditure already incurred on the Eastern Section of the Kistna Delta including share of cost of anicut is	RS. 16,55,405
Further expenditure required. { On sanctioned estimates ...	4,57,764
{ On estimates yet to be sanctioned	8,81,700
Estimated ultimate total cost of the section	29,94,869
Average revenue prior to the construction of the anicut	54,445
Acreage do. (not known)	.....
Present acreage, 63,928	.....
„ revenue	3,29,537
Ultimate acreage, 270,000	.....
„ revenue	11,53,825

2. From these particulars it appears that the gross return on the expenditure already incurred is 16.6 per cent., while that on the ultimate expenditure will be about 37 per cent. The latter figure will no doubt be considerably modified when the project comes to be fully worked out, for several reasons, among which may be noticed that the ultimate area is based upon the supposition that the irrigated area will amount to 400 acres per square mile of the area commanded, and it is tolerably clear that, since the late Colonel Anderson, when Superintending Engineer of the Division, made this estimate, further investigations have shown that there is a good deal of Government land in the upper parts of the delta, which, though under the channels, will continue to be cultivated with dry crops, and that, where the lands are Zemindary, the proportion of irrigated land will not probably exceed 250 acres per square mile, while it will take a long time before even that proportion is reached. Secondly, in order to make fair progress with the works, it may be necessary to make such arrangements for obtaining a sufficient supply of labour as will add to the cost of the work. His Excellency the Governor in Council however considers that, after making full allowances for these and similar circumstances, the returns will be very ample, and the estimate for widening and improving the Main Canal, which was approved in the Order of the 30th September last, No. 2,362, will accordingly be submitted for the sanction of the Government of India as one of the completion estimates for the delta to be carried out from Loan Funds. It is very desirable that the widening of the main duct should be gone on with steadily during the short time yearly that any such work can be carried on, and though it will be a long time before the supply for the ultimate acreage, whatever that may be, will be needed, it is improbable under the circumstances indicated that the capacity of the Main Canal will, with every exertion which can be made, more than keep pace with the demands upon it.

*Proceedings of the Madras Government, Public Works Department,
13th March 1871.*

3. The Chief Engineer for Irrigation has recently made a tour of inspection in the delta and has recorded in a memorandum, dated 11th January 1871, No. 7, a considerable amount of information regarding the present state and requirements of both its sections. A copy of the Proceedings in which orders on this memorandum have been passed will therefore be transmitted to the Government of India with the estimate for the Main Canal.

G. O., No. 722, dated 10th March 1871.

(True Extract.)

(Signed) J. MULLINS, Major, R.E.,
Joint-Secretary to Government.

To the Superintending Engineer, 2nd Division.

- „ Chief Engineer for Irrigation.
- „ Revenue Department.
- „ Controller of Public Works Accounts.

Exd. E. C. Shunker.

PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, 13th March 1871.

No. 318.

No. 743.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,

PUBLIC WORKS DEPARTMENT.

IRRIGATION, No. 22.

SIR,—I am directed to transmit, for the consideration of the Government of India and sanction for execution from Loan Funds, an estimate, amounting to Rupees 1,13,530, for enlarging and improving the Main Canal of the Eastern Section of the Kistna Delta, and to submit therewith the Proceedings of this Government as per margin, in which the considerations, which have secured the approval of His Excellency the Governor in Council to this estimate, are fully explained.

No. 2,362, dated 30th September 1870.
„ 722, dated 10th March 1871.

2. I am to state briefly here that the present acreage under the canal is 63,928, that the ultimate area was, some years since, estimated at 270,000 acres, but this is likely to be subjected to considerable reduction, as, instead of the irrigation extending to 400 acres per square mile commanded, it will probably only in some parts of the delta amount to this, while in others the proportion may be taken at 250 acres per square mile. The irrigation, where the lands belong to Government, being voluntary, and, where they are Zemindary, being dependent on several considerations, it would not serve any useful purpose to attempt at present to indicate more accurately what the ultimate area will be. The circumstances of each sub-section of the delta will be carefully inquired into, and care will be taken to confine expenditure on each of the canals to making them of a capacity proportioned to the probable early demands upon them, as experience has shown that even the expressed wishes of the ryots are not always to be depended upon.

3. I am to point out that, while the estimate now submitted will, if fully carried out, make the Main Canal capable of carrying water for the full area originally intended, the progress of the work will necessarily be slow, and it will require considerable exertions to enable the widening to be pushed forward as fast as is desirable. It will be noticed also that want of room between the town of Bezwarah and the river has necessitated the adoption of a greater surface fall, and consequently velocity, than would otherwise have been deemed proper, and no probable reduction of the ultimate area to be supplied would make a diminution of the capacity of the main duct desirable, as, with a reduced discharge, the only effect would be the diminution of the surface fall, which would be advantageous.

I have the honour to be,

Sir,

Your most obedient servant,

(Signed) J. MULLINS, Major, R.E.,
Joint-Secretary to Government.

Exd. E. C. Shunker.

No 150

Sup. Tyn. Office 22.12.15

Encl. to Court.
Pleading left &
16 APR 1943 No 1590
17.12.15
Ref.
Deis.
as
23.12.15
Verdict
29.12.15

Filed by
Sup. Tyn. Office 22.12.15

No 150

Supy Engr Office 2d Div
Camp Kaligina
1st February 1891.

From

Colonel F. J. Mobley RC

Superintending Engineer 2d Div

To

The Chief Engineer for
Irrigation

Sir

I have the honor to enclose

Enclosures

2 Statements

statements showing to the best of my ability
the information required in your note No 531 A.
12th September 1890 called for in G. O. No 2362,
30th September 1890.

2 The estimated acreage &c is copied from
calculations made by the late Colonel Anderson
when District Engineer Kistna & Superintending
Engineer.

3 The information mentioned in your para 9
is I believe answered by the accompanying
statement also prepared by Col Anderson.

I have not yet been able to obtain any
information by which I can fairly check
his estimates; the quantity of primary lands
irrigated & irrigable being unknown, and not
easily calculated as where the river or another
distinct forms the boundary we have no limiting
line.

I have the honor to be

Sir
Yours most Obedt Servt

F. J. Mobley

Supy Engineer 2d Div

Col RC

616-14111-2-12

Statement showing the proposed Capacity of the principal Irrigation Channels in the Krishna Delta.

2
15

13

	Bottom width in feet	Depth of water in feet	Surface fall per mile	Velocity in feet per second	Discharge in cubic yards per hour	Probable acreage of cultivation	
Channel to eastern bank of Krishna	90	6	7'	2.2	174,000	87,000 ^{1d/}	
Eastern bank Channel	45	6	7'	2.1	90,000	45,000	
Side Channel Masulipatam Canal	42	6	7'	2.1	85,000	42,000	87,000
							117,000
<u>Central Delta</u>							
Main Channel to 8 mile	196-230	8 1/2-7	6"	2.1	470,000	238,000 ⁽⁺⁾	
Western bank Channel to Kolloor	75	6 1/2	6"	2.2	154,000	75,000	diff: 15,000
Kolloor to Vallatur	60	6	7'	2.2	120,000	60,000	— 17,000
Vallatur to Iskapully Channel	45	6	7'	2	84,000	42,000	— 13,000
Iskapully Channel to 8 mile	30	6	7'	2	62,000	30,000	15,000
Iskapully Channel	30						15,000
	30						75,000
Main Channel 8 to 13 mile	180	6 1/2-6	6"	2	320,000	160,000 ^{19/}	
East side Channel at Ganapatam Canal	42	4 1/2	10'	2.4	70,000	35,000	} 158,000
West side Channel	24	4 1/2	10'	2.2	41,000	20,000 ^{14/}	
Commamore Channel to 8 mile	120	6	6"	2	206,000	103,000	
Below 8 mile	100	6	6"	2	174,000	87,000	
Lungabudra						16,000	16,000
Commamore Channel at Garikapand 2.3 mile	75	6	6"	2	133,000	66,000	diff: 21,000
Opposite Raputla Tank	50	6	6"	2	94,000	47,000	— 19,000
Opposite Raputla Tank & Commamore	50-30	6	6"	2			47,000
							103,000

District Engineer Krishna
Belgaada 6 January 1863

(True Copy)
J. Macdonald
Superintendent

Sd/- J. Macdonald
District Engineer Krishna

Statement shewing the expenditure incurred on works in connection with the Krishna Ancient Project from 1852 to 1869/70

Name of Works	Main Canal	Drainage Channels	Total
Eastern Delta			
Ellore branch			
Ellore Canal proper	180,187	2,191	1,82,378
Budamari Branch	14,552	9,980	24,532
	194,740	12,171	206,911
Masulipatam Canal			
Masulipatam Canal proper	52,508	3,406	55,914
West side Channel	38,682	432	39,114
	91,190	3,838	95,028
Pullaru Branch			
Pullaru Canal	73,182	5,307	78,489
Godavari branch	10,809	7,321	18,130
Pullaru proper	82,179	18,301	100,480
East side Channel	27,744	30	27,774
Butter Codo	24	351	375
Buntumully Channel	4,876	"	4,876
Polerapu Kodu	12,686	9,653	22,339
Kalidindi Branch	1,336	176	1,512
	140,027	28,111	168,138
Eastern Bank Channel	44,965	"	44,965
Kistna Circumvent	35,518	"	35,518
Drainages	"	13,384	13,384
	115,453	10,116	125,569
Portion of Ament 24/2			3,997
			165,540

Western Delta

Nizampatam Canal

Nizampatam Canal/Proper	490,568	31,975	5,25,543
Eastern Side Channel	31,500	1433	33,223
West Side Channel	31,596	1432	33,028
	553,964	37,840	5,91,804

Western Bank Channel

Western Bank Channel/Proper	160,613	19,165	1,79,778
Vallatur Channel	12,824	5,534	18,358
Jokapully Channels	13,562	"	13,562
	186,999	24,699	2,11,698

Commamare Channel

Commamare Channel/Proper	326,749	35,245	3,61,994
Tingabudra	2,953	6,263	9,216
	329,702	41,508	3,71,210

Southern High Level Canal

River Embankment	29,955	"	29,955
	4,935	"	4,935
Drainages	40,072	"	40,072

Portion of Annual Expenditure

	114,562	10,404	1,24,967
			3,10,509
			1,58,183
Total Annual Project			32,35,688

Further expenditure required on sanctioned estimates.

Eastern Delta

	Estimate	Expenditure	Balance
Upper Pullairu Project	1,83,100	98,859	84,241
West Side Channel of Nizampatam Canal	3,49,860	38,625	11,235
Widening Head of main canal	20,080	12,324	6,756
Pynes Canal Project	4,14,193	80,864	3,33,329
Lower Pullairu Project	1,04,050	103,112	638
River Embankment	56,910	35,589	21,321
Kypalur Channel	6,130	5,886	244
			4,57,764

Western Delta

Side Channels of Nizampatam Canal	5,67,400	5,17,200	50,200
Commamare Channel Project	1,95,770	1,74,089	21,681
Heetanagaru main canal	2,27,404	206,125	70,279

Drainage Channel to dispose of drainages Rapully Lake

	10,460	9,412	1,048
			98,028

Superintendent Office
Camp Kalligiri M.R.
1 February 1871

Hubert Col M.R.
Superintendent

The Sup^r Engineer } (H. E. No. 100 of 1st July/77)
2^d Divⁿ

Expenditure already incurred
on the Eastern Section of the
Molina Delta, including
share of cost of audit is Rs 16,65,400

Further expenditure { on sanctioned
estimates " 2,67,764
on estimates
yet to be sanctioned " 8,81,700

Estimated ultimate total cost
of the section 29,94,869

[illegible]

Average Revenue prior to the
construction of the canals. Rs 54,445
Average ditto (not known)

Present Average 63,928

" Revenue _____ " 3,29,537

Ultimate acreage 270,000

" Revenue _____ " 11,53,825

2. From these figures

it appears that the

gross return on the expendi-

ture already incurred

is 16.6 per cent, while that

on the ultimate expenditure

will be about 37 per cent.

The latter figures will no

doubt be considerably mo-

dified when the project

comes to be fully worked

out for several reasons,

among which may be

noticed that the ultimate

area is based upon the

supposition

supposition that the irri-
-gated area will amount
to 1,00 acres per square
mile of the area com-
-manded and it is
tolerably clear that
since the late Colonel
Bucknour, when Super-
-intending Engineer of
the Division, made
his estimate further in-
-vestigations have shown
that there is a good deal
of land laid in the upper
parts of the Delta which
though under the chan-
-nel will continue to
be cultivated with dry
crops and that where the
lands are secondary the
proportion of irrigated land
will not probably exceed
250 acres per square mile,

while it will take a long
time before even that
proportion is reached.
Secondly in order to make
fair progress with the
work, it may be necessary
to make such arrange-
ments for obtaining a
sufficient supply of labor
as will add to the cost
of the work. His
Excellency the Governor
and Council however
consider that, after
making full al-
lowances for these and
similar circumstances,
the return will be very
ample and the estimate for
widening and improving
the main Canal, which
was approved in the order
of

of the 30th September last
No. 2362, will accordingly
be submitted for the sanc-
tion of the Govt of India
as one of the completions
contingents for the Delta
to be carried out from
Loan Funds. It is very
desirable that the widening
of the main duct should
be gone on with steadily
during the short time
yearly that any such
work can be carried out,
and though it will be
a long time before the
supply for the ultimate
acreage, whatever that
may be, will be needed,
it is improbable under
the circumstances indi-
cated that the capacity
of

of India with the entire
-mate for the main
Canal.

11/2/71 hu.

W.B.

of the main Canal will
with every exertion which
can be made more than
keep pace with the demands
upon it.

3. The Chief Engineer
for Irrigation has recently
made a tour of inspection
in the Delta and has
recorded in a Memorandum
dated 11 Jan'y/71
a considerable amount
of information regarding
the present state and
requirements of both its
sections. A copy of the
Proceedings in which
orders on this Memorandum
have been passed
will therefore be trans-
mitted to the Government
of

L. C. Ho. 8

6/6
To
1. The Chief Engineer
2. The Chief Engineer for Irrigation
5. Gen. Secy
Comd't.

(3)

No 743.

Sr.

The Secy to the Government
of India P. W. D.

Sir

I am directed to
transmit for the consi-
deration of the Govt of
India and, sanction for
execution from Local Funds,
an estimate amounting to
Rs 1,13,530 for enlarging
and improving the main
canal of the Eastern section
of the Krishna Delta, and to
submit therewith the
Proceedings of this Govt.
as per margin, in which
the considerations which
have secured the approval
of

N.

No 2362. 30 Sept 70
Feb 71

of His Excellency the Governor
in Council, to this estimate
are fully explained.

2. I am to state briefly
here that the present
acreage under the canal
is 63,928, that the ultimate
area was, some years since,
estimated at 270,000 acres.

But this is likely to be
subjected to considerable
reduction as, instead of the
irrigation extending to 400
acres per square mile com-
manded, it will probably
only in some parts of the
Delta amount to this, while
in others the proportion
may be taken at 200
acres per square mile. The
irrigation, where the lands
belong to Govt., being

voluntary, and where they
are Zemindary, being
dependent on several con-
siderations, it would
not serve any useful pur-
pose to attempt at present
to indicate more accurately
what the ultimate area will
be. The circumstances of
each sub-section of the
Delta will be carefully
enquired into, and care
will be taken to confine
expenditure on each of the
Canals to making them
of a capacity proportioned
to the probable early
demands upon them as
experience has shown that
even the represent wishes
of the Ryots will always
be dependent upon

3. I want to point out that, while the estimates now submitted will, if fully carried out, make the main Canal capable of carrying water for the full area originally intended, the progress of the work will necessarily be slow, and it will require considerable revision to enable the scheme to be pushed forward in fact as desirable. It will be noticed also that want of room between the town of Belgarda and the river has necessitated the adoption of a greater surface fall, and consequently velocity, than would otherwise have been

213
been deemed proper, and no probable reduction of the ultimate area to be supplied would make a diminution of the capacity of the main duct desirable, as, with a reduced discharge, the only effect would be the diminution of the surface fall, which would be advantageous.

M. 11/2/71

Ass.

21

Recd 14/3/71 with 2 Cps:
of G.O. 742 of 1871 & a copy each
of G.O. 2362 of 1870 & 772 of
1871 & an Estimate & one being
connected with G.O. 2362 of 1870

X Doubtful

21-11-42-43

C^o 610

Govt. of 1872 Madras.

PUBLIC WORKS.

To
The Superintending Engr
2nd Division
andTo The Secretary to the Govt.
of India.

Dated

Recd.

Encl. 2

G. O., 13 March 1872, No. 712-713

Nos. 316-317 & 318

Visakha Delta.—Passing orders on
letter from the Supg. Engineer
of the 2^d D. submitting infor-
-mation regarding the expen-
-diture incurred and further
outlay required for improving
the main canal of the Eastern
Section of the Visakha Delta.

Forwarding for sanction
from Local Funds an estimate
of Rs 1,12,530 for enlarging &
improving the main canal.

of the Eastern section
the Visakha Delta.