

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

6th January 1881, No. 1 I.

Irrigation.
Account.

Read the following papers :—

No. 1. Proceedings of the Madras Government in the Revenue Department, dated 17th December 1880, No. 1,729.

Proceedings of the Board of Revenue, dated 13th December 1880, No. 1,903.

From H. E. STOKES, Esq., Acting Collector of Salem, to the Secretary to the Board of Revenue, dated Salem, 6th December 1880, No. 389.

WITH reference to my letter No. 380, dated 27th November, I have the honor to report further regarding the recent floods in the Atúr taluk.

2. The rain-fall at Atúr from noon on the 21st to 6 A.M. on the 22nd was $8\frac{1}{2}$ inches. The flood in the Vasishtanadi commenced about day-break on the 22nd and had reached its height at Atúr between 9 and 10 A.M. The river rose 18 or 20 feet and overflowed the banks to varying distances on each side. Near Narasingapuram, a mile and-a-half east of Atúr, the flood broke over the low ridge on the south bank and poured into the valley on the other side.

3. There has not been much loss of life, as would certainly have been the case had the flood occurred at night. As far as ascertained five persons have been drowned, and one is still missing. Of the five, four belonged to a hamlet called Subrayapadiachyúr, which was built at a bend of the river, about 5 miles above Atúr. Some 20 houses in this hamlet were swept away by the stream, and 30 or 40 others fell, the mud walls having collapsed. Houses fell in like manner in all villages on the banks, and much stored grain and other property have been destroyed. The number of cattle lost cannot be exactly ascertained, but it is estimated at 150.

4. The crops on the river banks suffered heavily, the soil being in many places washed clean away, and sand being deposited in others so deep that all traces of the crops are gone. The nunjah assessment in such cases will of course be remitted; and as to the punjah I propose after the accounts, which are now under preparation, are completed, to ask the Board to sanction some remissions. The dry crops of cumboo and ragi were excellent, and were ready for the sickle; but wherever the flood reached they have been destroyed, and whole fields may be seen with the crop laid flat and the grains sprouting in the ear. The rains of late have been so continuous that this is the case even where the flood has not passed.

5. I think that remission in these cases together with grant of free passes for timber and bamboos, as provided in the Forest Rules, for the reconstruction of the houses that have been destroyed, will suffice, and that no special relief of any other kind is necessary. The inhabitants of several villages frightened by the flood are anxious to remove their houses to safer sites, and I have assured them that lands will be granted for the purpose. Applications in the usual forms will be submitted hereafter.

6. The road from Salem to Cuddalore, which adjoins the river on the south bank, has suffered heavily. It was breached completely when the flood broke across at Narasingapuram, and is stripped of metal and gravel in many places. The minor bridges and culverts have all stood, but the large bridge of nine arches across the Vasishtanadi at Talavasal has been completely destroyed. It was built on rock, but the water over-topped the parapet (judging from marks on trees adjacent) to a height of ten feet, and the structure could not withstand such pressure. The piers were lifted, foundation and all, from the rock and turned over. The reconstruction of it will probably cost the Local Fund Board at least 15,000 rupees. The Local Fund Engineer has examined the site and will prepare estimate without delay.

7. But this rich valley has especially suffered in the destruction of its irrigation works. There were fourteen anicuts between the head of the valley and the boundary of the district, a distance of about 30 miles; and of these 11 have been completely breached in this flood, and two very seriously injured. One, Appasamudrum, was breached before and has not been repaired. I enclose a statement giving the ayacut and revenue and rough estimate of the cost of restoration of these works, with the notes of my inspection, in which I have stated what I have sanctioned for temporary works to save the crops. Under the Vasishtanadi anicuts the irrigation is 4,128 acres, yielding revenue Rs. 31,331, and a rough estimate of the cost of restoration (which however I have no doubt will be largely exceeded if the Public Works Department deal with the works) is 37,000 rupees.

8. I have sanctioned Rs. 1,070 for temporary dams in the river and for restoring the channel heads, which have for the most part been destroyed, from the grant at my disposal for minor irrigation works. These sums are lump grants in aid, and represent roughly about a third of the cost of labour and the value of materials other than palmyra trees. The channels are usually cleared and maintained by Kudimaramat, but the exceptional circumstances justify assistance being given now. I hope that most of the standing crops will be saved by these works, but I am afraid that there will be a good deal of remission for shavi over and above that for crops destroyed by the flood.

9. The figures above given as to the amount of revenue dependent on the works and the cost of their restoration are such as will, I trust, induce Government to make an immediate and adequate grant for the purpose. The cost will certainly be recouped by revenue saved in two years, and the loss saved to the people, if the works are promptly repaired, will be six or seven times as great. All along the valley there are fine betel-nut topes which must perish if the works are not at once reconstructed. I beg that the Board will represent the matter strongly to Government, and will procure for me the services of a Public Works Department Supervisor to enable me to commence without delay. Most of the anicuts could be rebuilt before next cultivation season, but I am afraid Wodder labor cannot be got sufficient to finish them all. However, if money were available, I dare say that with the co-operation of the ryots the work might be done.

10. I have not been able to visit the Swetanadi valley. Of four anicuts belonging to Government on that river two have been breached, one injured, the top course of stones being carried away, and one at Veerajanur is safe. I have sent the Tahsildar down there and shall sanction temporary dams if the construction of them is possible.

11. Besides the anicuts 23 tanks and other works, large and small, have been breached. I have sanctioned for the repair of some of these works Rs. 1,459. I have employed a temporary Overseer and shall repair damages as far as the funds at my disposal will permit. I do not anticipate much loss of revenue under these works, as in most cases ring-bunds have been made and the ayacuts have wells.

STATEMENT showing injury to Irrigation Works in Atur Taluk.

Name.	Supplies.	Area in Acres.	Revenue.	Probable Cost of Restoration.	Remarks.
I.—ANICUTS ON VASISHTANADI (VELLAR).					
1. Belur, Upper Anicut.	Belur small tank	120	833	1,500	This was a rough stone dam, faced with a brick wall, and about 30 yards long. Rather more than half is gone on the left bank.
2. Belur, Lower Anicut.	Belur large tank	53	348	2,000	This was a rough stone dam without any facing. It is completely destroyed. Both of these tanks are full and uninjured and the supply will probably bring standing crops to maturity. I prohibited cultivation of fresh land in view to keep the supply for standing crops. No temporary dams can be made as the channels lie too high.
3. Kottavadi Anicut.	Ayacut and also Agraharam lands.	60	491	2,500	A rough stone dam, no facing. About two-thirds of it, or 25 yards, completely gone. The channel is in deep cutting for about a furlong and almost filled up. I sanctioned twelve palmyras and Rs. 100 for bamboos for the temporary dam which the ryots will construct and for clearing the channel head. One-third will be recovered according to custom from the Agraharamdars, who will also pay their share of the cost of restoration.
4. Kalyanageri Anicut.	Ayacut	139	1,054	3,000	A rough stone dam. Nearly all swept away and channel head much silted. Sanctioned fifteen palmyras and Rs. 70 for temporary dam and channel clearing.
5. Abinavam Anicut.	Ayacut	282	1,821	4,000	This work was classed as Imperial. It was a rough stone dam without an apron and has been destroyed except for a few yards on right bank. The channel lies high and is nearly destroyed for a quarter of a mile from the head, two calingulabs on it being also damaged. It is doubtful whether a temporary dam can be made; if not crops must be lost. Sanctioned 30 trees and Rs. 350.
6. Putragoundenpalayam Anicut.	Putragoundenpalayam channel.	97	1,066	4,000	This is also an Imperial work. It was a rough stone dam with a long wing at the channel head. Half the dam is gone, the wing is much injured and the channel silted. The ryots have cleared all but 70 or 80 yards and will complete this. Sanctioned 30 trees and Rs. 150 for the temporary dam.
	Do. Jamperi tank.	201	1,050	..	
	Yetapur channel	226	1,721	..	
7. Sinnasamudrum Anicut.	Ayacut	219	1,784	5,000	Also an Imperial work. It was a rough stone anicut faced with a brick wall. This wall and a sand sluice were added last year at a cost of about Rs. 1,500. The breach is now attributed to the sand sluice. Half the anicut, about 30 yards, is gone. The channel is high and is completely obliterated for about 80 yards, being blocked up with huge stones and sand. Sanctioned 40 palmyras and Rs. 150 for a temporary dam.
	Sinnasamudrum tank	150	1,286	..	
8. Peddanayakanpalayam.	Ayacut	203	2,094	4,000	Imperial. About a third of the dam gone. The channel lies low. The tank is also breached. Sanctioned 35 trees and Rs. 125 for temporary dam.
	Tank	43	233	..	
9. Appamasamudrum.	Ayacut	133	1,170	..	This was breached a year or two ago, and the ayacut was given last year at panjah rates. There is scarcely any of the anicut left. Some materials were collected and a commencement of repair made by the Public Works Department, but nothing more was done.
10. Atur Anicut	Ayacut	403	2,669	5,000	Imperial. This is a very long anicut with an island in the middle. There was a long brick wall and wing to the channel head. Twenty-five yards of the anicut are gone and the rest is much injured. The channel is not much silted and will be cleared by the ryots. The temporary dam will be somewhat difficult. Sanctioned 20 palmyras, some karivelam trees and Rs. 150.

Statement showing injury to Irrigation Works in Atúr Taluk—cont.

Name.	Supplies.	Area in Acres.	Revenue.	Probable Cost of Restoration.	Remarks.
I.—ANICUTS ON VASISHTANADI (VELLAR) —cont.					
11. Amapalayam Anicut.	Ayacut	164	1,257	1,500	A minor work. This is a strong stone anicut concreted and faced with a brick wall. The anicut breached for about eight yards on the north side. Doubtful whether temporary dam can be made. The flood broke in here and about 50 acres of nunjah has been destroyed and as much more greatly injured. Gave permission to the ryots to cut a small channel from stream which they say will supply the nunjah which is still in good condition.
12. Kattukottai Anicut.	Ayacut	276	2,357	2,000	The anicut and the Manivilandan tanks are minor, but the Sarvayi tank is an Imperial work. The anicut, of rough stone, is breached for about 25 feet. Temporary dam, I think, impossible, but when the river falls may be found practicable. The tanks are full and will suffice for the crops under them. The channel crosses a small river by small anicut, about quarter of a mile from the main anicut. The small anicut had a brick face wall, which was lifted bodily and pitched over the stone anicut behind, which however is uninjured. This stream will keep the channel full and the crops going for 25 or 30 days. Sanctioned Rs. 25 for channel clearing.
	Sarvayi tank	289	2,427		
	Manivilandan tank	170	1,350		
	Sarvayi channel	41	439		
	Manivilandan channel	48	311		
13. Pattuturai Anicut.	Ayacut	96	543	1,500	This is a minor work. It is a stone dam with a brick crest wall and wing-walls at each end. The north wing is completely gone, and the rear portion of the anicut much injured at that end. The south wing embankment is breached and the end wall left standing. The wing-walls appear to me unnecessary. The anicut might abut on rock at the north side, and on the south should be lengthened about 40 feet. The anicut is not breached and the channel is only slightly silted and will be cleared by the ryots without aid.
	Talavasal tank	128	824		
14. Aragalúr Anicut.	Aragalúr tank	261	1,850	1,000	These tanks are Imperial. The anicut is on a line of rocks across the river, about quarter of a mile below the Talavasal bridge site. The upper course of stones has been swept away in parts and there is a small breach in the wing on the Aragalúr side. An earthen bund can be made by the ryots on the crest of the anicut and the supply maintained. The Aragalúr channel is only slightly silted, but the Periyéri channel, which is in deep cutting, is much silted for about 300 yards. Sanctioned Rs. 75 for clearing.
	Periyéri do.	223	1,722		

II.—ANICUT ON SWETANADI.

1. Chandárapatti Anicut.	Chandárapatti tank	363	3,282	500	Imperial. Anicut damaged but not breached.
2. Thondayampatti Anicut.	Ayacut	85	561	2,000	Minor work. Anicut is swept away all but four yards. The tank is full.
	Tank	116	451		
3. Aniyampatti Anicut.	Ayacut	143	1,236	3,000	Imperial. Breached for about 20 yards.
	Do.	81	544		
	Tank	219	1,368		
	Tadanúr tank	647	4,718		

III.—TANKS BREACHED.

1. Atúr Puduyéri ..	Included under Atúr anicut.	..	..	..	
2. Udiattir ..	..	210	1,570	693	Three breaches. Repair sanctioned.
3. Tenkumarai ..	..	115	481	88	Small breach. Imperial work; sanctioned.
4. Talavasal ..	..	139	939	..	Small breach near calingula.
5. Thuppanatham ..	..	80	501	..	
6. Tennavagudi pa-layam.	..	122	776	..	
7. Punavasal ..	Small tank	60	407	..	

Statement showing injury to Irrigation Works in Atúr Taluk—cont.

Name.	Supplies.	Area in Acres.	Revenue.	Probable Cost of Restoration.	Remarks.
III.—TANKS BREACHED—cont.					
8. Sattapodi ..	....	177	1,091	357	Imperial. Sanctioned.
9. Aripalayam ..	....	34	227	380	
10. Mettupalayam Kottambadi.	....	111	651	..	
11. Singipuram ..	....	185	1,180	321	Sanctioned.
12. Rajapalayam ..	Jembukuttai tank ..	20	92	..	
13. Silayampatti ..	....	50	240	..	
14. Umayapuram ..	....	319	1,606	88	
15. Oddaypatti ..	....	78	370	..	Small breach near calingulah.
16. Settinayakam palayam.	....	50	262	..	
17. Lakshmasamudram.	....	190	1,278	..	
18. Aniyampatti ..	....	233	1,431	..	
19. Ichampatti ..	....	44	376	..	Calingula breached.
20. Rajampalayam ..	Oddan anicut	25	143	..	
21. Ponnarampatti ..	Anicut	67	567	1,800	
22. Govindapalayam Do.	Do.	109	857	..	
23. Tandrayapuram.	....	94	678	..	Supply channel breached.

(Signed) H. E. STOKES,
Acting Collector.

SUBMITTED to Government in continuation of Board's Proceedings, dated 30th November 1880, No. 1,821.

2. The Collector now submits a full report on the damage caused by the late storm in the Atúr taluk. Fortunately the loss of life (five persons) was exceptionally small considering the height to which the Vellar rose. Mr. Stokes attributes this to the floods having occurred in the day time. The loss of cattle was also small. The damage to crops was serious and the loss of the fine crops of cumboo and ragi will be severely felt. The Board await the Collector's proposals for the grant of punjah remissions and approve the measures specified in paragraph 5.

3. The damage to irrigation works is extensive. Of 14 anicuts on the Vashishtanadi (Vellar) 11 are stated to have been completely breached and two very seriously injured, three anicuts on the Swetanadi have also sustained injury, one being swept away and about 23 tanks and other works have been breached. The total revenue dependent on these works according to the statements furnished by the Collector is Rs. 59,204, and the probable cost of restoration is roughly estimated at Rs. 46,227. Mr. Stokes has sanctioned small sums from the grant at his disposal for the repair of minor irrigation works for temporary works to save the crops, and urges that an immediate and adequate allotment be made for the complete repair of the works before the next cultivation season; he also applies for the services of a Public Works Department Supervisor to enable him to commence without delay. The Board strongly support these recommendations and request that funds may be placed at the Collector's disposal at once. An allotment of Rs. 10,000 might be sanctioned pending preparation of estimates.

4. The Board are indebted to Mr. Stokes for the full information he has furnished and the clear manner in which he has placed it before them.

(True Extract.)

(Signed) C. A. GALTON,
Secretary.

THE Government concur with the Board in commending the Collector's prompt action.

2. The enclosures to the Board's Proceedings will be referred, in original, to the Public Works Department, (Irrigation Department,) for the issue of the necessary orders.

(True Extract.)

(Signed) C. G. MASTER,
Secretary to Government.

No. 2. ORDER THEREON, 6th January 1881, No. 1 I.

THESE papers will be communicated to the Superintending Engineer, Second Circle, who will promptly render the Collector assistance in the way of subordinates, and apply to the Chief Engineer, Public Works Department, for any extra subordinates that may be found necessary.

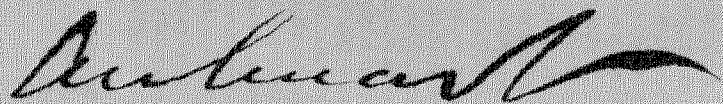
2. Government not being in a position at present to appropriate additional funds to Salem out of the ordinary grant assigned by the Government of India for the current year, an application will be made for a supplemental grant of one lakh of rupees, in anticipation of the sanction of which Rs. 10,000 will be placed at the Collector's disposal as an addition to the grant in aid of Rs. 17,500 already made available for the up-keep of minor irrigation works; and, similarly, Rs. 10,000 will be added to the repair grant of the Salem division under Irrigation and Navigation Works for which Capital and Revenue Accounts are not kept, to enable the repair of the damaged irrigation works classed as Imperial to be promptly attended to.

3. With regard to the works, in this part of the district, classed as Imperial, the emergent repairs commenced by the Collector to enable this season's irrigation to be completed will be carried on by him so far as may be necessary to secure this object. The further repairs necessary should be provided for in the Public Works Department on regular estimates, in which provision must, as far as possible, be made for preventing a recurrence of the damage. All expenditure incurred by the Collector on emergent repairs to Imperial Irrigation Works will be recouped by the Superintending Engineer from the Irrigation and Navigation Repair Funds at his disposal.

4. Ordered that the following letter be sent.

(Here enter No. 2 I., dated 6th January 1881.)

(True Extract.)



Lieut., R.E.,
Ag. Under Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Second Circle.
" Chief Engineer for Irrigation.
" Chief Engineer, Public Works Department.
" Examiner of Public Works Accounts.
" Revenue Department.

Ed. S. T. Austin.
Spare Copies

IRRIGATION
ACCOUNT.

Gobt. of (1881) Madras.
PUBLIC WORKS.

To
The SUPERINTENDING ENGINEER,
SECOND CIRCLE,
do., do., do.

Dated January 6th.
To
Rs. 20,000
By
G. O. 6th January 1881. No. 1 E.

JANUARY.
Nos. 1-2.

Damages to Irrigation Works in Aror Taluk, Salem District. - The Superintending Engineer, Second Circle, directed to render prompt assistance to the Collector for repairing the — and Rs. 20,000 placed at the disposal of the Collector for the same in anticipation of the sanction of the Government of India for a supplemental grant of one lakh of rupees to the ordinary grant.

14/12/81
G.O. 389 244-81

No. 42

Super Engineer's Office, Second Circle
Coimbatore 27th January 1881.

From,

The Superintending Engineer
Second Circle.

To,

The Chief Engineer
P.W. Department.

Sir,

With reference to G.O. No. 1. I dated 6th January 1881 I have the honor to point out that at present there are no works classed as Imperial in Salem District as the list of works proposed to be Imperial has not yet finally been made out and approved of by Government; at present the list is under reference with the Collector.

2. It is however I believe the wish of Government that as soon as the emergent work is completed by the Collector and as soon as this Department has prepared the necessary regular estimates that the works to be hereafter classed as Imperial should be executed by this Department.

3. In the G.O. I am directed to apply to you for any extra establishments I may require I have to point out that already I have as directed by you sent 1 Supervisor and 2 Overseers to South Arcot District to assist in repairing the damage done

done by the late Cyclone and also I have now under this last G.O. directed Mr. Conductor Lannon Sub Engineer now on privilege leave (granted on a medical certificate) to join Salem District and place himself under the Collector's orders (the Collector informs me that this assistance is all he requires) and as this is the case I am unable without further assistance to do anything at present towards the preparation of the estimates required.

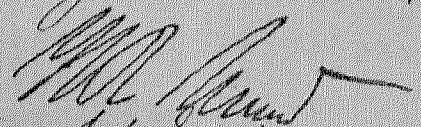
4. I therefore request that the services of an experienced Assistant Engineer, Sub Engineer or Supervisor may be given me for the special work in the preparation of estimates $\frac{1}{2}$ in the Athoor Valley as soon as possible. Surveyors $\frac{1}{2}$ of course will be required but for this separate sanction will be obtained.

5. I request I may be informed when it is likely that the Supervisor and 2 Overseers sent temporarily to South Arcot may be expected to return to this circle. Their services are required at Calicut, in North Arcot and Chingleput.

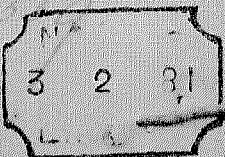
I have the honor to be

Sir

Your most Obedt servant

 Major
Sub Engineer, second Circle.

From



The Superintendant
Second Circle.

arrangements you propose.

If a temporary Overseer
is appointed, funds for the
purpose should be appropriated
from the Grant for Temporary
Establishment.

Jan 3/2

off/C.

W. J. 5/2

8/2
5/2

Dated 27th
Recd: 28th } Jan'y: 1881.

No: 42.

Damages to Irrigation
Works in the Saline Dis-
trict: —

Requests, with
reference to the — re-
ferred to in G.O. No: 1 of
5th January 1881, that
the services of an experienced
Assistant Engineer, sub-
Engineer or supervisor
may be given for the
special work in the
preparation of estimates
in the Mador valley.

C.S. 2. R. 112
42



N^o 559

GOVT.
OF MADRAS.

1881.

DEPT.

SECRETARY.

N^o 119 N.

Chepauk, 2nd February 1881.

Handwritten note: 1881/25

OFFICE NOTE.

To

to

It is found to be impossible to provide a man for this work from the existing establishment. It will therefore be necessary to promote an overseer to Supervisor (in which rank we have many vacancies) and making a temporary appointment as Overseer to fill the vacancy thus caused.

N^o 1060

5/2/81

Handwritten signature

By: S.

If the overseer is qualified, there is no objection to the arrangement.

P. W. D.

Note.

With reference to the Honble Mr. Audleston's note on enclosed draft G.O. the undersigned has the honour to state that the work to be done being that of a Supervisor and not of an Overseer, and there being many Overseers well qualified for promotion, and vacancies existing in the sanctioned scale of Supervisors, it is considered only right that the man selected should have the rank of Supervisor.

Very truly
Yrs
Handwritten signature

To

To replace the Overseer
thus promoted a temporary
appointment must be
made, and special sanction
is required for this, as
the total scale of subor-
dinates (Sub Enquiers,
Superiors and Overseers
together) is full, though
the full proportions of the
upper grades are not main-
tained, there not being
work for them under
ordinary circumstances.

John Perry
Major R.E.

for Secy to Genl. P.W.D.

15th July 1881.

PHH

14/2/81

4000.

Proceedings of the Madras Govt.

Under date the 10th Feb 1881

read the following:-

from the Supg. Eng. 2nd Circle. (H.E. No 42 of 30th January 1881)

The Chief Engineer will arrange for the promotion of a qualified Overseer to the rank of Supervisor, a temporary appointment being made to fill the vacancy thus caused in the Overseer grade.

2. Funds will be appropriated to meet the cost of the temporary appointment on a report being submitted by the Supg. Engineer of the exact sum required to

But I am afraid that I cannot do this. I have the money to do the work. I am sorry the money cannot be made in any other way.

1829
JWS 6.1.81

Attch to the
supg. Eng. 2nd Circle
17/2/81

Recd 15-2 Rd 17.2.81.

to set such expenditure as
may be incurred during the
current official year -

S
9/2

Pat. 382 N 7 W July, 1881

177 + 178

S. E. 2nd line with terms
Ex. P. W. W. 326 of 11/2/81
C. E. R. W. D. on original
12-2-81

Recd. 15.2.81. Rtd 17.2.81.
C. A. Z. R. D. 2.