

(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. 2444

Press

B.P. No.

Misc.

80 . 82

Dated

4-10-1873.

195.

Not to be folded or roughly handled

Read the following papers :—

No. 80. Read the following letter from Major R. F. OAKES, R.E., District Engineer, Tanjore, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Tanjore, 4th September 1873, No. 590 :—

With reference to G. O., No. 2,101, dated 23rd August, I have the honour to observe that neither the Government nor Lieutenant-Colonel Mullins appear to have recognized what I endeavoured to point out in my No. 418, dated 21st July, viz., that the adoption of weirs with flush crests at the level at which water was to be permanently retained in tanks would lead to a very heavy expenditure in raising all tank banks above the level which would otherwise be necessary, while the cost of the new calingulabs or weirs which must have very long crests would be considerable, and thus a needless expenditure would be incurred without any real compensating advantage.

2. It appears absurd to discuss the meaning of the word "self-regulating," but in the flush weirs there is no action by means of which the capacity of the weir can be largely increased when the water has risen to any given height; while, in the weirs with dam stones, as soon as the mud bank between the stones is over-topped and thus destroyed, the area of the escape is largely increased and the discharge is very considerably augmented; hence the latter may be termed "self-regulating," while the term is inapplicable to the former. The height of dam stones may, of course, be easily regulated.

3. I may further observe that if the flush crest of a weir is on such a level as to admit of a tank retaining its full supply when the water is up to the level of the crest of the weir in many cases, either very long and expensive weirs must be formed, or the extra height to which water will rise to admit of the surplus being discharged, will, in a chain of tanks, cause the cultivation under the upper tank to be submerged by the backwater of the lower tank; even under existing arrangements this often occurs and leads to quarrels and it appears undesirable to augment this evil.

No. 628.

No. 81.

Note by the Chief Engineer for Irrigation.

Vide end of paragraphs 2 and 4 of Note printed in these Proceedings.

The first objection raised by Major Oakes has already been considered and disposed of in G. O., 23rd August 1873, No. 2,101.

2. The second objection, viz., that flush escapes may, in the case of chains of tanks, lead to the submergence of lands on the margin of the water-spread, refers to a matter of little or no importance. The submergence would at most last but a few hours. The quarrels to which Major Oakes refers are not due to such a submergence as this, but to the fact that ryots retain water above the proper level by means of the dam stones of calingulabs, and thus for long periods swamp lands

Proceedings of the Madras Government, Public Works Department,
4th October 1873.

on the margin of the proper water-spread. This reason against flush escapes is therefore one which must really be taken to be in favour of their adoption.

FORT ST. GEORGE,
13th Sept. 1873.

(Signed) J. MULLINS, Lieut.-Colonel, R.E.,
Chief Engineer for Irrigation.

No. 82.

ORDER THEREON, 4th October 1873, No. 2,444.

IRRIGATION, No. 6.

ORDERED to be recorded.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the District Engineer, Tanjore.
" Chief Engineer for Irrigation.

Exd. T. O'Connor.
Spare Copies.

No. 628.

Note by the Chief Engineer for Irrigation

Enclosure.
one letter.

Vide end of para
2 and 4 of
Note printed
in those Pro-
ceedings.

The first objection raised
by Major Oakes has already
been considered and disposed of
in G. O. 23rd August 1873, No. 2101.

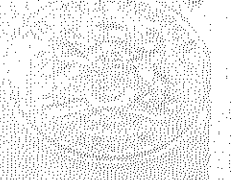
The second objection viz: that
flush escapes may, in the case of
chains of tanks, lead to the sub-
mergence of lands on the margin
of the water spread, refers to a
matter of little or no importance.
The submergence would at most
last but a few hours. The
quarrels to which Major Oakes
refers are not due to such a
submergence as this, but to the
fact that ryots retain water
above the proper level by means
of the dam stones of Calingulaks,
and thus for long periods swamp
lands.

lands on the margin of the proper
water spread. This reason against
flush escapes is therefore one which
must really be taken to be in
favour of their adoption.

Fort Saint George
13th September
1873

Memorandum sent to
Chief Engineer for Irrigation

To,
The Secretary to Government
P. W. D.



P.W.D. 5873 Department
of Public Works
The Chief Engineer for
Irrigation

To The Secretary to
Government
P. W. D.

Dated 10th /
Recd 15th September 1873

No. 428

Enclosure - 1

Note on the subject
of flush escapes being
forwarded by the District
Engineer of Tanjore.

No. 2400-4th Oct 73.

1873

for 16 Oct 1873 (P.W.D. 257)

No 590

District Eng's Office -
Tanjore 4th September 73.

Sir,

Major. R. F. Baker. R.E.
District Engineer. Tanjore.

To

Colonel J. W. Walker. R.E.
Secretary to Government.
P. W. D.

Sir,

With reference to G.O. No 2101,
dated 23 August, I have the honor to
observe that neither the Government
or Lieutenant Colonel Mullins
appear to have recognised what I
endeavoured to point out in my
No 418, dated 21st July viz, that the
adoption of tanks with flush crests
at the level at which water was
to be permanently retained in tanks
would lead to a very heavy expendi-
ture in raising all tank banks above
the level which would otherwise be
necessary, while the cost of the
Calingbah or weir which must
have very long crests would be considerable

and

and thus a needless expenditure would be incurred without any real compensating advantage.

It appears absurd to discuss the meaning of the word "Self regulating" but in the flush weir there is no action by means of which the capacity of the weir can be largely increased when the water has risen to any given height, while, in the weir with Dam Stones, as soon as the mud bank between the Stones is overtopped & thus destroyed the area of the escape is largely increased and the discharge is very considerably augmented - hence the latter may be termed "Self regulating" while the term is inapplicable to the former. The height of Dam Stones may of course be easily regulated.

I may further observe that if the flush crest of a weir is on such a ~~level~~ as to admit of a tank retaining its full supply when the water is up to the level of the crest of the weir, in many cases, either

916
either very long & expensive weirs must be formed on the extra height to which water will rise to admit of the surplus being discharged, will, in a chain of tanks, cause the cultivation under the upper tank to be ⁱⁿ & brought by the back water of the lower tank - even under existing arrangements this often occurs & leads to quarrels and it appears undesirable to augment this evil.

I have the honor to be

Sir,

Yours most ob^{ly} Serv^t

H. A. M. Major R. R.
District Engineer Tanjore

Madras 6/10/73

Ch. 10/10

4 October 1873 No. 2444

P.M. 5072/73.

From certain persons known
in the subject of the
enquiry & remarks.

No. 590

Quoted 4th { Report
Recd 6th { 30/10/73

to the Secretary to the
P.M. 5072/73.

The District Engineer
Savayak

P.M. 1873 Madras
from Ch. 4897.

No. 2444 P.M.D.

Pro of the Madras Govt.
Read the following
from the St. Engineer [H. 59074 Sep/73]
The Engineer [H. 11 - 628 of 13-20/

Ordered to be re-
corded.

2/19

10/10/73
G.M.

To
The D. Engineer Tanjore ✓
" Chief Engineer for
Irrigation ✓

S.C. dated 9/10/73

[Faint, illegible handwriting]

[Faint, illegible handwriting]

pp. 80-82.

*12. 23. 1887.
ms. 6. 16. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.*

Govt. of 1873} Edition.

PUBLIC WORKS.

To The District Judge
Tanjore

Journal of Management Education

22

陈 明 强

W. C. C. Co. 1872, No. 242

1882

Hush Escapes to Lunk.

~~The~~ Note my two (half) notes.
For Wright on letter from
the 2d Inst. Langier,
Opening certain obser-
vations on the subject
of Flock Escapes.