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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU
REVENUE DEPARTMENT

G.O. No.	329	Press.
~~B.P. No.~~		Mis.
Dated	17-1-1877	~~197~~

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Read the following:—

No. 139.

Note by the Chief Engineer for Irrigation.

THE District Engineer, Cuddapah, for s, with his letter marginally noted, an
No. 1,807, dated 16th November 1876. imate in connection with the Nagara-
alli Dongulehervoo Tank and supply
channel situated in the Cuddapah Taluq, C apah Range.

2. The nature of the work proposed execution and the heads of account to
which it is chargeable are as follow:—

ORDINARY AGRICULTURAL.

Original Works.

Constructing head sluice to the supply channel	Rs. 770
New stone revetment and gravelling to tank bund	3,670

Repairs.

Raising and repairing the bund	1,160
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Total Rs. 5,600

3. The following particulars of this tank are recorded—

Ayacut area	Acre 258	(Circar 203) Acres.
		(Inam 55)
Assessment	Rupees 1,698	(Circar 1,320) Rupees.
		(Inam 378)
Average revenue	1,413	
Highest	1,671	
Expenditure during the previous four years, Rupees 886.		

The area of the catchment basin is 4 square miles; the maximum flood supply is calculated at 849 cubic feet per second, for discharging which as surplus there are two weirs, one at the west end 20 feet in length with four vents with shutters each 3 feet x 2 feet, and the other at the east end 150 feet in length.

This tank is an important one, and is situated above the town of Cuddapah. In addition to the supply it receives from the catchment basin it receives the waters of the Bugga river, which has a masonry anicut constructed across it.

The head of the supply channel is about $4\frac{1}{2}$ miles from the tank, and as this channel crosses the line of railway it is proposed to construct a head sluice near the Koochalagundum anicut to keep the supply under control.

It is also proposed to raise the bund of the tank where the water is deepest.

The revetment is low and rests on bad soil, in many places it is almost upright, it will therefore be rebuilt at a uniform slope of 1 to 1 with gravel backing.

The estimate provides for constructing a head sluice in the supply channel, raising and sectioning the bund, and for dismantling and rebuilding the revetment with gravel backing.

The flood discharge from 4 square miles would approximate by Ryves' formula to 1,417 cubic feet per-second, and the depth of water on the weir crest to discharge this to $22\frac{1}{2}$ inches in depth instead of 1 foot 6 inches as provided. The difference is immaterial as the bund is sufficiently high to allow of the necessary head, and besides the formula in question gives somewhat large discharges for small areas.

*Proceedings of the Madras Government, Public Works Department,
9th January 1877. No. 74.*

The head sluice provided for in the estimate is supposed to be adapted to certain existing circumstances, that is to say, a river with banks of a certain height above, or it may be a certain depth below, maximum flood level. No sections of channel and none of the river banks are given, and the suitability of the work can hardly under such circumstances be judged of.

The existing slopes should be shown in the sections of the sluice, as also the level of the river bank.

Rupees 886 were expended on the tank in 1875, and it should have been stated in the report what was the nature of the work executed.

The estimate for the tank is recommended for sanction, but it is considered that that for the sluice should be returned for the addition to the plan of the necessary information.

(Signed) A. DE C. SCOTT, Major, R.E.,
Dy. Chief Engr. for Irrigation,
for Chief Engr. for Irrigation.
Department.

5th January 1877.

To the Secretary to Government, Public Works Department.

No. 140.

ORDER THEREON, 9th January 1877, No. 74.

IRRIGATION, No. 19.

Account.

The following estimate from the Cuddapah Range, forwarded by the District Engineer, Cuddapah, is sanctioned:—

NAGARAZAPALLI DONGULCHERVOO TANK AND SUPPLY CHANNEL.
Irrigation.

Group or Project.	Fund.	Class.	Name of Tank, Canal, or Channel.	Particulars of Work.	Amount.
..	Ordinary Agricultural.	Original Works.	Nagarazapalli Dongulcherveo Tank and Supply Channel.	New stone revetment ..	Rs. 5,870
		Repairs ..		Repairing the bund ..	1,160

To be carried out by the Public Works Department Officer in charge, Cuddapah Range.

- This sanction has been registered as No. 256—I. of 1876-77.
- The District Engineer, Cuddapah, will furnish the additional information required in connection with the sluice to the Nagarazapalli Dongulcherveo Tank and supply channel.

(True Extract.)

To the District Engineer, Cuddapah.
" Collector of do.
" Chief Engineer for Irrigation.
" Examiner of Public Works Accounts.
" Revenue Department.

Exd. S. T. Austin.
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Major-General, R.E.,
Secretary to Government.

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