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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No.	2110	Press
B.P. No.		Mis.
Dated	26 ⁶ 1877	196

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GOVERNMENT OF MADRAS.
REVENUE DEPARTMENT.

26th June 1877, No. 2,110.

Read the following papers:—

No. 548 Proceedings of the Board of Revenue, dated 1st September 1876,
No. 2,246.

Read again Board's Proceedings, dated 13th March 1876, No. 723.

Read also the following letter from C. RUNDALL, Esq., Acting Director of
Revenue Settlement, to C. A. GALLTON, Esq., Acting Secretary to the
Board of Revenue, dated Madras, 13th June 1876, No. 2,379-58:—

I HAVE the honor, with reference to Board's Proceedings (enclosure returned),
No. 723, of the 13th March last, to
No. 263, of 11th December 1875, and No. 47, of 24th February 1876, offer the following remarks on the
questions raised by the Collector of
Cuddapah in his letters to the Board as per margin. :

2. In the first communication Mr. Horsley alludes to the ruling of the Board,
under date the 22nd August 1874, Proceedings, No. 2,355, that water-rate should
be levied in the Cuddapah District for a second wet crop raised on dry land, which
proposition he opposed on the grounds given in his letter printed with the foregoing
Proceedings. In his second letter the Collector advocates the extension of the
exemption he thus formerly recommended, and proposes that so far as well irrigation
may be concerned, that "the present limit of distance from the tank bund should
be maintained, but all wells beyond that should be allowed to irrigate wet or dry
or second crop on wet or dry land without payment of water-rate or second-crop
assessment." Mr. Horsley takes exception also to the manner in which the revision
of tank ayacuts is being carried out by the Settlement Department in his district,
and wishes the operation, as at present conducted, to be stopped.

3. Of the two questions thus raised, it is desirable that I should refer first to the
revision of tank ayacuts which is being conducted in conformity with the rules
noted in the margin. It is contended

G.O., No. 181, of 27th January 1871.

that the tank ayacuts are already too
large for the tanks, and that the tendency
of the action of the Settlement Department is to augment the area or ayacut still
further. At the same time seemingly the Collector regards it as a general complaint
that the tanks are in a neglected state, and that, owing to the gradual silting
process, the capacity has been curtailed; whilst the ayacut has been added to since
1861 by lands shown in the A Register as having received water for a certain
number of years, being registered as wet. The result of this silting process is
stated to be that, unless the tanks fill two or three times a year, the supply received
is insufficient for the cultivation of their ayacuts.

4. Save the additions to the tank ayacuts in comparatively recent years, the
condition of the tanks in Cuddapah is much the same I expect as in the neighbouring
districts. The expenditure on the repair of the tanks is necessarily limited; and
as regards the numerous smaller or least important sources, the complaints as to
the neglected state they are in may have some foundation; but compared with
former days and other districts, the more important and larger tanks are probably
as efficient now or more so than formerly.

5. From what I have observed elsewhere, it is an old established custom for
the smaller tanks to require to fill two or three times a year to be able to supply
their ayacut. The capacity of the tanks is such that it may reasonably be regarded

as a necessity from the first. As a rule, the rain is not limited to one fall, but is distributed over a period of six months. A tank received a partial supply, which is added to by a second fall of rain, and with the first heavy fall the tank probably fills; and, as the supply is expended, it is replaced by further falling rain at intervals, if the season is propitious. That the seasons vary considerably is well known, and it is, no doubt, difficult to determine to what extent the ayacut of a tank may be revised. The object aimed, at by the rules is to revise the area to conform with the ordinary capabilities of the tank in respect to irrigation in fair seasons. Dry lands ordinarily irrigated along with the adjacent wet area are thus transferred to wet. The capabilities of a tank must necessarily, for the purpose of the rules, be gauged in some way. Mr. Horsley is not disposed to accept for his district the course elsewhere; and seemingly he wishes the large enough already, and will not supply an increased area.

6. The circumstances of all ayacuts are not the same. Under some tanks the area may be excessive; under others it may be considerably less than the ordinary capability of the supply may suffice for. Again, in other instances, part of the ayacut may be out of cultivation, and dry land on a lower level, or of better quality, may be now irrigated instead. Whatever is done, it is certain that no hard and fast rule can apply. The case of each ayacut must necessarily be examined and dealt with on its merits, and to do this some principle must be followed, and I contend that the course adopted by the department—that of the ordinary capability of the tank in the past—is the safest and the most readily ascertained method. It may reasonably be argued, that land irrigated under a source in the past in fair seasons may be regarded as so irrigable in the future.

7. Mr. Horsley maintains that the irrigation of the past, as shown by the accounts or A Register, is mostly fictitious, and that the proposals of the department made on the strength of the A Register, are unreliable, and so far as personal inquiries are concerned are not founded on fact. There are some cases evidently from what is stated, that show the entries by the accounts to be misleading. Still, it cannot be reasonably believed that, as a rule, all entries are fictitious, or that any large portion of the water-rate levied in the district is gratuitously paid by the ryots when water may not have been supplied or obtained, and they know no liability to exist for such payment. If the department proposed the changes to the ayacuts solely on the basis of the A Register, they would, no doubt, be apt to be misled. The transfers are, however, based as well upon actual inspection of the ground; and thus if care be exercised, any chance of being misled is obviated. Should the inspection show the dry assessed area to be more or less surrounded by ordinary wet lands, and to be partly irrigated and partly embanked for irrigation and cultivated as wet only, in such years as the supply may suffice, the conclusion that the supply in ordinary years will irrigate such land is well supported. Much depends upon the position of the lands to be changed with reference to the regular wet area; and, it is closed by wet, the land is probably unsuited to the cultivation save under irrigation, the moisture from the surrounding or adjacent wet fields being detrimental to the growth of any dry crop.

8. There are thus many circumstances needing consideration when dealing with the question of revision of tank ayacuts. The tendency of the changes effected, so far as tabulated, is explained in the accompanying letter from Mr. Cox which affords information, as well as to Mr. Horsley's action in respect to the proposals submitted for his consideration by the Deputy Director.

9. The following abstract represents the effect of the changes as given in the statements submitted by Mr. Cox:—

Items.	Wet Ayacut as registered in the Revenue Accounts.		Deduct transferred from Wet to Dry.		Balance.	Add transferred from Dry to Wet.		Revised Wet Ayacuts.
	ACRES.	CENTS.	ACRES.	CENTS.	ACRES.	CENTS.	ACRES.	CENTS.
<i>Koilkuntla Taluq, Kurnool.</i>								
Deputy Director's Proposals	5,394	55	821	41	4,573	44	860	21
As amended by Collector ...	5,394	55	820	53	4,574	82	842	10
Difference ...	...	...	...	...	...	...	...	...
<i>Proddatur Taluq, Cuddapah.</i>								
Deputy Director's Proposals	1,165	80	112	75	1,053	3	114	22
As amended by Collector ...	1,165	80	215	83	950	45	51	53
Difference ...	...	...	...	...	...	...	...	...
<i>Jamalamadagu Taluq, Cuddapah.</i>								
Deputy Director's Proposals	190	99	12	24	178	75	78	24
As amended by Collector ...	190	99	128	50	62	49	...	...
Difference ...	...	...	...	...	...	...	...	...

The three taluqs comprised one settlement report, and Koilkuntla, as is well known, formerly belonged to the Cuddapah District. There is very slight variation between the proposals and the Collector's amendments for the latter taluq. If the tank bed area, 432 acres, newly adjusted under wet, be excluded from the comparison, the net result is a decrease of 410 acres as pointed out by Mr. Cox, and not an increase.

10. For the villages tabulated under the Proddatur and Jamalamadagu Taluqs, the Deputy Director's proposals would leave the ayacuts of the former within an acre or two of the original area, whilst the Collector's alterations would reduce the same by 165 acres. In the latter taluq the changes effected are most extensive. The former ayacut of 190,99 acres was proposed by Mr. Cox to be enhanced to 256,99 acres. Mr. Horsley, however, objected to much of the area being retained as wet at all, and cut it down to 62,49 acres. The reductions, seemingly appertains to lands under wells. Such want of accord is inevitable, if the Collector treats the proposals submitted to him upon considerations other than the rules sanctioned by Government for the purpose, and upon which the proposals may have been framed.

11. At paragraphs 18 and 19 of Board's Proceedings, No. 915, of 16th June 1872, the course advocated by Mr. Banbury of treating as wet, lands under Dasabandam, Doruvu, and Itifak wells was approved and confirmed by paragraph 4 of G.O., No. 145, of 5th February 1873. In conformity with this ruling, lands irrigated from sources of the foregoing nature, deriving their water-supply from a recognised Government source of irrigation, have been brought to wet under the rules by Mr. Cox. If irrigated for a crop other than paddy, Mr. Horsley has generally declined to retain such lands under wet, or to transfer them to that head when previously dry, but has made exceptions in some instances. In this way in Maddanur and Dommara

* Villagewar statements and plans accompany the Deputy Director's letter.

Nandyala of the Jamalamadagu Taluq, it will be seen that, in the case of 71,65 acres irrigated by Dasabandam wells in the first village and 11,29 acres irrigated by Doruvu wells in the second village, the Collector transferred the whole of the irrigated area to dry for the reasons marginally given.

(1). Under all the works the lands are poor, and to raise wet crops does not pay. The lands should all be classed dry.
(II). Wet crops cannot be cultivated. The land should be dry.

is not, however, referred to, nor is the present treatment of lands generally irrigated by wells for a second crop on wet land specified, though the Collector expresses himself so strongly as to the illiberality of the orders now in force in respect to such irrigation. It is not to be inferred from Mr. Horsley's letter that any concession has previously been granted by Government in cases of the nature to which he refers. The question was, nevertheless, raised at a comparatively recent date by Mr. Storr, who suggested that one-third in place of one-half of the ordinary wet assessment should be charged. Mr. Horsley, in forwarding on the proposal, did not regard the reduction as sufficient, and recommended that the

charge should be limited to one-fourth. * Board's Procs., No. 85, of 11th January 1872. The Board* supported the latter proposition, and it was approved by G.O., No. 928, of 12th June 1872, as a temporary measure, pending the introduction of the revised settlement. Thus the reduction of the former charge by one-half has had effect during the past four years, and lands irrigated for a second crop partly by wells are at present treated differently from lands directly supplied by a tank or channel for a second crop.

Subsequently Mr. Storr, in remarking on the rules for the revision of tank ayacuts,* questioned the fairness of any charge at all for such irrigation; and, in disposing of the reference (Proceedings, No. 2,087, of 28th October 1872,) the Board remarked at paragraph 6:—"The question whether the rule that 'second crop' is to be charged for when it is grown with water obtained from private wells in wet land is an important one involving a very large amount of revenue in most of the districts. It is an indisputable fact that such wells are generally made, because their position with regard to the tank assures them a good supply of water, and that it is almost impossible to discover, when there is a dispute, whether the water for the second crop has been drawn directly from the tank by channels or indirectly by means of the well. There may be some cases of hardship, but they must be few in number, and the interests of the State require that the rule should not be relaxed."

22. The Collector's proposition at paragraph 7 of his letter, No. 47, of 24th February, has thus been previously before the Board and negated after due consideration, both in respect to irrigation from wells in wet land for a second crop in wet land, and to either first or second crop in dry land; and I fail to see either on the facts the Collector now records as to the action of wells during the past season, or in the other reasons he adduces, that would justify wells being freed entirely from any charge for irrigation for a second crop. The difficulties referred to by the Board would always be present; and, whilst it is essential that the fact of such irrigation being mainly dependent upon wells in many cases should be recognized and allowed for in adjusting the second-crop charge in such cases, there is no real necessity to forego the charge altogether as recommended, for it is based on good grounds and would lead to endless complications if attempted.

23. The Collector represents that the Government gain a good deal and the ryots very little by the existence of these wells. That the wells do, as stated, play an important part in the irrigation of his district and secure much of the Government revenue in indifferent seasons, must necessarily be admitted, as also that much of the second-crop assessment raised under many of the ordinary tanks is mainly due to irrigation afforded by these wells. With due deference to the Collector's opinion, I must, however, submit that there are substantial advantages on both sides. The circumstances of wells sunk in the wet lands differ materially from wells in dry land. The size and depth being much less, they are nothing like so costly to construct, or so expensive to maintain the work, and as the water springs freely, and the lift is comparatively slight, they are capable of irrigating a very much larger area than wells not similarly located in wet land. As a rule, even a slight store of water in the tank above keeps the level of the supply in the wells within a few feet of the surface and thus renders the lift easy and effective. For a further description of wells in wet lands, paragraphs 14 and

15 of my letter, No. 464-134, of 28th June 1873, printed, with Board's Proceedings, No. 2,169, of 23rd October 1873, can be referred to. Though the remarks then recorded applied to North Arcot, they are in a great measure applicable, I believe, to Cuddapah also. I contend, therefore, that wells in wet lands possess very decided advantages over wells in dry lands; and that these advantages accrue entirely from the wells being sunk in Government irrigation, whereby a much more ample supply and one much more easily worked is secured.

24. The question is one of great importance, for Cuddapah is not singular in respect to this well irrigation. It exists to a large extent in North Arcot and most other districts, and the revenue involved would amount to a large sum. In Cuddapah during the past five years the assessment realized for second-crop irrigation varied according to the season from a little over half a lakh to nearly one lakh of rupees, as exhibited in the subjoined statement, notwithstanding the concession made by G.O., No. 928, of 12th June 1872, which limited the charge for irrigation mainly from wells to one-fourth of the single crop assessment. It must moreover be remembered that this is irrespective of any consolidated second-crop charge:—

Taluqs.	Fasli 1280.	Fasli 1281.	Fasli 1282.	Fasli 1283.	Fasli 1284.
	RS.	RS.	RS.	RS.	RS.
<i>Principal Division.</i>					
Cuddapah	8,592	3,180	5,400	9,599	11,421
Proddatur	621	2,268	3,815	3,016	1,627
Jamalamadagu	5,958	3,170	5,497	5,040	5,445
Budwail	6,723	5,012	11,960	4,806	3,415
Sidhout	8,980	6,768	8,067	7,908	5,130
Pullampett	13,502	12,943	18,094	15,687	18,819
Total ...	44,376	33,341	52,833	46,056	45,857
<i>Sub-Division.</i>					
Pulivendla	3,280	2,880	3,304	3,329	2,935
Royachoty	6,235	3,390	4,594	3,071	8,352
Kadiri	1,729	2,541	2,969	2,518	2,822
Voilpand	10,021	8,629	10,184	6,543	12,664
Madanapalli	8,890	5,989	13,228	7,324	20,489
Total ...	30,146	23,432	34,279	22,785	47,262
Grand Total ...	74,523	56,773	87,112	68,841	93,119

25. It is, of course, impossible to indicate or conjecture what proportion of this second-crop assessment may appertain to sources mainly depending on wells for second-crop irrigation, and which Mr. Horsley would wish to see relieved of any charge for second crop; but probably the greater number of tanks in the district—as small tanks are very numerous—would be affected by the proposal, and thus a considerable proportion of the charge now realized would be affected.

26. Putting aside the revenue involved, many difficulties would beset any attempt to free in this manner the tanks mainly depending upon wells for the irrigation under consideration, as pointed out by the Board in Proceedings, No. 2,087, of 28th October 1872, already quoted from. The capabilities of a tank to supply second-crop irrigation depends generally upon its capacity as a reservoir; but in some seasons with an early and considerable fall and a fair distribution of rain during the remainder of the monsoon, even the smaller tanks are able to afford direct irrigation for two crops, if not for the whole at all events for

some portion of the area. Moreover, wells are now and again used to start and irrigate for a time the first crop should the burst of the monsoon be deferred, and paddy follows subsequently as the main crop. Thus the aid which the wells afford is not confined to the second crop only but in part may apply to both. Again, the degree to which tanks depend upon the wells for second crop irrigation varies considerably; and, if the sources mainly depending upon wells for second crop cultivation were to be freed, it would be considered a hardship to exact the liability of wells in the case of wells under tanks capable in most years of supplying irrigation direct to some extent.

27. Much has already been done to alleviate the former assessment on well lands. Under the rules which originated with the orders of the late Court of Directors in 1852, the exceptional assessment upon old well lands in Cuddapah as elsewhere was adjusted to dry rates under the sanction of Government accorded by G.O., No. 1,836, of 29th June 1869, provided the lands were unconnected with Government irrigation. The reduction of assessment which the measure entailed in respect to land in occupation in Cuddapah amounted to no less than Rupees 1,24,291—*Vide* G.O., No. 279, of 14th February 1871.

28. As regards irrigation from wells in wet land extended to dry, the charge according to the rules in force for the bulk of such irrigation falling under the second-class rates is, after deducting one-fourth for lift, Rupees 2-4-0 per acre for a paddy crop and Rupees 1-2-0 for dry crop or second crop. Considering the great value possessed by irrigation in Cuddapah, this charge is very moderate, and should, I think, be maintained. At present the single water-rate of Rupees 2-4-0 under the second or Rupees 3 under the first class covers any charge for second crop also, but this limitation of the rules applies only until the revised assessment may be introduced. Hence the system differs somewhat at present in the settled and unsettled taluqs.

29. Under the new settlement, precarious second crop irrigation of the nature adverted to will, in conformity with the ruling of Government contained in G.O., No. 880, of 14th July 1874, be offered to the cultivators to compound for at their option on favorable terms. Owing to the comparatively little irrigation in the taluqs already settled, little has been done in this respect. The rates proposed by Mr. Banbury were one-third or one-fourth of the first-crop charges, but in the sub-division one-fifth, to the main division of the district as well. Seemingly there is but slight disposition to compound in the settled portion of the district; but, if the rates are thus be afforded the ryots if they are inclined to compound at all. The one-third rate might be generally regarded as applicable to tanks from which the direct irrigation may be precarious for a second crop, the one-fourth rate to tanks only partially able to irrigate a second crop as a rule and depending in part on wells, the one-fifth to tanks under which irrigation for a second crop might be mainly by wells. In some instances, it would doubtless be requisite to treat the second crop irrigation of one and the same source where it might vary considerably by block under ten or more of the rates fixed. This course has been already advocated at paragraph 9 of my letter to Board, No. 2,057-46, dated 15th May 1876.

30. The course to be pursued subsequent to settlement has not seemingly been definitely discussed and settled with reference to the views expressed by Government in G.O., No. 928, of 12th June 1872. The principle of a reduced charge for second-crop irrigation mainly from wells having been conceded, it is necessary and reasonable that it should be maintained. I would therefore propose that, if not compounded for in the manner indicated above, the charge be confirmed as formerly at one-half of the first crop assessment for tanks from which direct irrigation may be precarious, and fixed at one-third and one-fourth, respectively,

for tanks only partially able to irrigate a second crop and, as a rule, depending in part on well irrigation, and tanks under which irrigation for a second crop may be mainly by well.

31. Thus in place of a compounded charge of one-third, one-fourth, and one-fifth, the annual charge, when irrigation may be availed of, would be respectively one-half, one-third, and one-fourth, or one rate higher. This, I must admit, would limit the variation in the charge to a small amount and offer less inducement to the ryot to compound; but if the reduction of the charge, in cases where the second-crop irrigation may be mainly supplied by wells, to one-fourth is conceded, as it must be under the new Settlement, greater variation could only be secured by fixing the lowest compounding rate below one-fifth, which I regard as undesirable.

32. The addition for second crop, if compounded for or separate, would be as under, calculating the rate upon the amended wet rates recommended in my letter, No. 348-21,* dated the 9th February 1876, as applicable to the Budwail, Sidhout, and Pallampett Taluqs:—

* Board's Procs., No. 749, of 16th March 1876.

Class and Sort.	FIRST GROUP.					SECOND GROUP.					THIRD GROUP.				
	Rate per Acre for 2nd Crop.					Rate per Acre for 2nd Crop.					Rate per Acre for 2nd Crop.				
	Rate per Acre for 1st Crop.					Rate per Acre for 1st Crop.					Rate per Acre for 1st Crop.				
	Half.	One-third.	One-fourth.	One-fifth.		Half.	One-third.	One-fourth.	One-fifth.		Half.	One-third.	One-fourth.	One-fifth.	
I.	2	4	5	6		7	8	9	10	11	12	13	14	15	16
II.	12 0	4 0	3 0	2 6	RS. A.	10 0	5 0	3 5	2 8	2 0	9 0	4 8	3 0	2 4	1 13
III.	9 0	3 0	2 4	1 13	RS. A.	8 0	4 0	2 11	2 0	1 10	7 0	3 8	2 5	1 12	1 6
IV.	7 0	2 5	1 12	1 6	RS. A.	6 0	3 0	2 0	1 8	1 3	5 0	2 8	1 11	1 7	1 0
V.	5 0	1 11	0 12	0 10	RS. A.	4 8	2 4	1 8	1 2	0 14	4 0	2 0	1 5	0 13	0 6
VI.	3 0	1 0	0 12	0 10	RS. A.	2 8	1 4	0 13	0 10	0 8	3 0	1 8	0 13	0 6	0 6
VII.	1 10	3 5	2 8	2 0	RS. A.	0 0	4 8	3 0	2 4	1 13	8 0	4 0	2 11	2 0	1 10
VIII.	1 0	2 11	1 13	1 2	RS. A.	7 0	3 8	2 5	1 12	1 6	6 0	3 0	2 0	1 8	1 3
IX.	8 0	4 0	3 0	2 11	RS. A.	6 0	3 0	2 0	1 8	1 3	5 0	2 8	1 11	1 4	1 0
X.	5 8	2 12	1 6	1 2	RS. A.	4 8	2 4	1 8	1 2	0 14	4 0	2 0	1 5	0 13	0 6
XI.	4 8	2 4	1 2	1 0	RS. A.	2 8	1 4	0 13	0 10	0 8	3 0	1 8	0 13	0 6	0 6
XII.	7 0	3 8	2 8	2 0	RS. A.	6 0	3 0	2 5	1 12	1 6	6 0	3 0	2 0	1 8	1 3
XIII.	5 0	2 8	2 0	1 13	RS. A.	4 8	2 4	1 8	1 2	0 14	4 0	2 0	1 5	0 13	0 6
XIV.	4 0	2 4	1 2	1 0	RS. A.	2 8	1 4	0 13	0 10	0 8	3 0	1 8	0 13	0 6	0 6
XV.	7 0	3 8	2 8	2 0	RS. A.	6 0	3 0	2 5	1 12	1 6	6 0	3 0	2 0	1 8	1 3
XVI.	5 0	2 8	2 0	1 13	RS. A.	4 8	2 4	1 8	1 2	0 14	4 0	2 0	1 5	0 13	0 6
XVII.	4 0	2 4	1 2	1 0	RS. A.	2 8	1 4	0 13	0 10	0 8	3 0	1 8	0 13	0 6	0 6
XVIII.	7 0	3 8	2 8	2 0	RS. A.	6 0	3 0	2 5	1 12	1 6	6 0	3 0	2 0	1 8	1 3
XIX.	5 0	2 8	2 0	1 13	RS. A.	4 8	2 4	1 8	1 2	0 14	4 0	2 0	1 5	0 13	0 6
XX.	4 0	2 4	1 2	1 0	RS. A.	2 8	1 4	0 13	0 10	0 8	3 0	1 8	0 13	0 6	0 6

33. Under G.O., No. 577, of 5th April 1864, the minimum charge for second crop in Trichinopoly was fixed at one rupee, and this rule was extended to Salem. Under wells in the lower group an abatement of half a rupee was allowed. I would recommend that this minimum charge be dispensed with as regards Cuddapah, and any reduction for lift be limited to lands unirrigated directly for the first crop. If the fixed charge is reduced consequent on the irrigation being from wells, the occasion for any allowance for lift disappears. Moreover, where sometimes the irrigation may be by flow and sometimes by lift, it is impossible to recognize any variation, and the abatement for lift is allowable only in cases where irrigation may be solely by lift. Under the lower rates in Cuddapah there will rarely be any second crop irrigation, as the area under the lower tarans is generally very slight.

34. Should these proposals be approved, the charge in respect to each source of irrigation, if not wholly compounded for, could be adjusted at the time of Settlement by the Settlement Officer with reference to the circumstances of each source, and recorded in the descriptive memoir of the village and any doubt after obviated.

35. According to paragraph 7 of his second letter, Mr. Horsley's proposal is limited to wells not within the prescribed distance of ten yards from the tank bund. I fail to see that this limit is applicable, for it refers to wells in unirrigated and not irrigated land. Moreover, wells at a considerable distance from the tank bund are often equally aided by the tank, provided they are well placed and within the fall away from or under current proceedings from tank.

36. At paragraphs 17 to 19 of his letter Mr. Cox questions the water-supply returned for some of the tanks alluded to by Mr. Horsley. He shows that the tanks in the neighbourhood registered 21 inches, and that while some of the tanks received a half supply, several are returned as not having stored any water at all. The rainfall of Cuddapah and several adjacent districts is marginally given; and, though for the whole season the fall does not appear very short, it was wonderfully partial in some localities, and not seasonable or sufficiently

steady and continuous to throw any large supply into the tanks. I am inclined to agree with Mr. Cox that the recorded supply is open to doubt in some instances, regard being had to the area cultivated and matured under paddy and other irrigated crops, and the number of wells concerned. For instance the four months' tank in Yepperanla (4th village in Mr. Horsley's list) received seven days' supply or one-sixteenth of a full tank. There are no wells in the wet area, but with the aid of four wells in the adjoining dry land, 76.02 acres out of 81.25 acres in occupation were cultivated, 21.64 acres being paddy and 54.38 acres other irrigated crops. The whole was matured and 12.36 acres besides cultivated under second crop. The one-sixteenth of the tank could never have sufficed for the large area, or could the four wells in dry land have matured so many acres of cultivation

ENCLOSURE No. 1.

From J. H. M. COX, Esq., Deputy Director of Revenue Settlement, Kurnool and Cuddapah Districts, to C. RUNDALL, Esq., Acting Director of Revenue Settlement, dated Cuddapah, 19th May 1876, No. 417-164.

I HAVE the honor to forward, herewith, the information called for in your Proceedings of the 19th ult. No. 782-119,* and to submit a few remarks with reference to the views expressed

by Mr. Horsley on the subject of the augmentation of the wet ayacuts in this district.
2. Enclosed are three* statements exhibiting the result of the revision of ayacuts in the whole of the taluq of Koilkuntla, Kurnool District, and in seven and eighteen villages of Jamalabadugu and Proddatur respectively according to the accounts made up as far as the B

Statements have been received from the Collector. The black ink figure represent the proposals made by this department, and the corrections in red ink show the changes as recorded by the Collector.

3. In Kolikuntla it will be seen that the Collector's modifications are very insignificant, though in some villages there is a marked addition to the wet ayacut. On the whole, the total figures show a slight increase, but deducting the 432 acres odd relating to the waterspread of tanks which has been now transferred to wet, there is a decided decrease in the wet ayacuts in this taluq, although, as already said, there is a marked increase in some villages.

4. In Jamalamadugu and Proddatur, the Collector of Cuddapah has made great changes on our proposals, the nature of which may be learnt by a reference to the enclosed B Statements for three villages forwarded for your inspection, together with the plans and different Telugu accounts from which these statements have been compiled, as per accompanying Telugu List VII.

5. In one of these villages, objection is raised to the addition proposed to be made to the ayacut of a tank although these new lands have apparently been growing paddy for some years past, while the cultivation of the old ayacut has continued without intermission, except here and there a field left waste because the ryots did not care to cultivate it that year.

6. The other cases relate to Doruru and Dasabhandam wells, and these represent the bulk of the changes shown in the statements referred to in paragraph 2. The objections raised to the lands under these sources being classed as wet, is that they do not and cannot grow wet crops, i.e., paddy. This may, as a rule, be said of all wells, and I have explained to Mr. Horsley and Mr. Gribble that we have not registered the lands altogether with reference to the crops grown on them, but in consideration of their receiving water from a fairly trustworthy Government source, and there are cases in which Mr. Horsley's approval of some lands growing similar crops being retained as wet, the only proviso that he has made being that they should be registered as "single crops."

7. Even in the case where a Dasabhandam well has been reported as out of repair, &c., we have retained the ayacut under it as wet for the simple reason that, as long as the Inam grant is allowed for its upkeep, it must be considered a Government source. Such ~~cases~~ are, of course, brought to the notice of the Tahsildar with a view to the Inamdar being served with a notice calling upon him to execute the necessary repairs. Meanwhile, as the ayacut cannot be transferred to dry until the Inam has been resumed, the ryots are informed that they are at liberty to claim remission of wet assessment until such time as the well is repaired, &c.

8. The Collector has also taken exception to the remark entered in the B Statements against well ayacut to the effect that lands newly transferred to wet have been so treated because they "have been invariably cultivated with wet crops." With reference to this I must explain, in the first place, that it is the form adopted from the statement received with the circular of instructions, and next that the garden crops grown with the help of water have been considered by us to all intents and purposes as not *bona fide* dry crops and therefore wet since we have nothing between. I shall feel obliged by the necessary instructions as to whether the form of remark should be altered in future.

9. Doruru, Dasabhandam, and Itifak wells being recognized as Government sources, the ayacut under them must, I conclude, be registered as wet, otherwise there will be a large area left under Tirwajastee which, I conclude, the present revision was intended to rectify. Where necessary lands under wells are more leniently treated in the Settlement than tank lands, and should the lands be poor they are more lowly classified and rated accordingly by us. The wet rate however is sure to be higher than the dry rate *plus* Rupees 1-2-5* water-rate leviable on lands growing raggi, &c., according to the water-rate

* Rupees 1 8-0 less one-fourth deduction for lift.

rules now in force, but I do not think that the assessment fixed in the Settlement will be higher than they can really bear, particularly as no change is made for second crop. While showing all these wells as Government sources, we should not be justified, I think, in entering the ayacuts under a large number of them as dry. This will become a more serious matter in the sub-division taluqs with their numberless Dasabhandam wells.

10. I now come to the subject of Mr. Horsley's letter to the Board of Revenue. There is no doubt immense force in the assertion he makes that since the tanks are yearly becoming more and more silted up, the ayacuts must necessarily be reduced. I do not know upon what rules the extent of the ayacut originally registered as wet was fixed, but I observe in the face of the above assertion the fact that in many cases not only in this but also in other districts a larger extent of land is being irrigated under tanks and is paying Tirwajastee, while, as far as can be ascertained, hardly any complaints have been made by the occupants of the regular wet lands, nor, as a rule, has any remission been granted on those ayacuts except in years when there has been a decided scarcity of water.

11. I do not ignore the fact that wells dug in the wet lands to help to keep up the cultivation, and I have already admitted in my letter of the 7th February, No. 105-47, that I recog-

nize the great assistance these wells do afford, but I do not quite see how the thing is to be remedied in the way Mr. Horsley proposes. He advocates no increase to be made to the ayacut, and that the ryots should be allowed to take water from the wells in the wet lands free of charge. The second proposition, I think, be allowed, provided the water is not drawn from the wells until that in the tank has been quite used up and none is flowing on to the wet lands from it. Some such rule as this seems necessary, as otherwise any amount of water might be drawn away from the proper wet lands, and even then the crops brought to maturity by means of these wells having already received some water from the tank would still be chargeable with Tirwajastee.

12. According to Mr. Horsley's own admission, the men owing the lands which we are proposing to add to the wet ayacut being influential people will, notwithstanding their fields are registered as dry, still continue to take the water to the detriment of the wet lands, paying or not paying Tirwajastee or water-rate as the case may be. The dry assessment *plus* water-rate being invariably less than the full wet rate will only tend to encourage this state of things, whereas, if the full wet assessment is charged, the man will most likely demand a full flooding, and this will no doubt cause the other ryots to call out or relinquish their lands for want of water. An inquiry might then be made into the matter and the necessary changes carried out.

13. This is, I think, the only way in which the thing can really effectually be righted, unless it is done at once scientifically by instituting a regular survey of all the tanks to determine their capacity and then calculate the area that such a volume of water can irrigate, fixing the ayacut with reference to levels, &c. Any other way of solving the question conclusively is to me impossible, and all that we can do in such a revision as is now being made is to examine the actual state of things on the ground, look into past accounts, to consult the wishes of the ryots, making such changes as seem necessary, and rectifying all glaring irregularities. There must ~~be~~ will be errors in judgment, and where this is the case it seems preferable in instances like ~~these~~ the benefit should not be altogether on the side of the ryot who knows his own interest and may, I think, be trusted to bring to notice any injustice he considers he has really suffered when the matter can be better gone into and adjusted on its several merits.

14. I may here mention that I spoke to the District Engineer some days ago and asked him to let me know the result of the survey which it appears has been made in the case of one or two tanks that require repair, but I have not heard from him yet. He told me it would be no easy matter to determine the capacity of all the tanks, and decide on what would be a fair ayacut for ~~each~~.

15. In consulting the Revenue Accounts, the A Register referred to by the Collector is also examined as it forms the record of all lands which have already under authority been classed as wet, but the present state of things on the ground are likewise taken into account as mentioned above, and alterations made where necessary.

16. The cultivation details given in the Classification Registers do not afford the same help as the Revenue Accounts, as they only represent the state of things existing at the time of demarcation some ten or twelve years back. I must explain, however, that the latter do not in many cases bear out the facts ascertained by our examination in the field.

17. I am inclined also to think that the reports furnished with reference to the quantity of water received by the different tanks is not altogether to be relied upon. For instance, in the statement which accompanied Mr. Horsley's letter, two tanks in Madvaram and four out of the seven in Kuruguntapalli are said to have received no water at all, while the other three tanks in the latter village were about half filled. All nine tanks drain the same range of hills situated between their villages and Vantimitta at which latter place the rain-fall registered in the District Gazette last year was nearly 8 inches in August, 6½ in September, and 4 in October, besides 1 in November and nearly 1½ in December.

18. Similarly, in Ramapuram, a six months' tank is said to have received 3 months' supply, and two 2 months' tanks only half a month's water each, while the other seven in the same village, all 2 months' tanks, got nothing. These all lie in one and the same narrow valley on the confines of the Budwai Taluq, and the large tank would appear to receive its supply from the small hills to the west instead of from the high Vellegonda range bordering Nellore, which may naturally be supposed to catch more of the rain that falls.

19. Another circumstance observable from Mr. Horsley's statement is that a larger extent of land was cultivated with wet crops under tanks two and three in Ramapuram, which are said to have received no water at all, than under the two shown to have had a fifteen days' supply, while in the one case there were only two and eight wells to help the irrigation against ten in the other.

20. With reference to paragraph 4 of the Proceedings under reply, I must explain that it is customary in this district to enter the water-rate charged on any land each year in the Kulwar or Asamiwar chitta of that year, and similar entries are made in the men's puttas if produced at the time of Jamabandi; otherwise the item only appears in the Kulwar chitta and the assessment collected accordingly.

21. In conclusion, pending the disposal of the different subjects now under discussion, I have deemed it advisable to postpone the introduction of the different changes proposed by Mr. Horsley into our accounts, and have left the entries in the registers now being submitted standing just as they are.

P.S.—I think the classification of the several crops as laid down in the table of rates to be charged for water supplied from the Irrigation and Canal Company given at page 251 of Mr. Gribble's Manual of this district shows that the wet crops of which we have been speaking ought rather to be called wet than dry. They come under Clause 3, whereas Clause 4 refers to dry crops.

(True Copy.)

(Signed) C. RUNDALL,
Acting Director of Revenue Settlement.

Enclosures Nos. 2 to 27.—Statements, Ayacut Sketches, Telugu Accounts, &c.

Enclosure No. 28.—List of Enclosures.

SUBMITTED to Government with reference to G.O., dated 10th January 1876, No. 32.

Under reporting on the agricultural prospects of the district at the end of last year, Mr. Horsley observed, "if Government would treat wet wells more liberally, the effects of a dry season would not be so severely felt by the ryot." Government in their order quoted above desired to have the views of the Collector, the Director of Revenue Settlement, and the Board of Revenue placed before them in greater detail regarding the question raised by the Collector. Mr. Horsley in conforming to the above requisition has also stated his views in regard to the revision of tank ayacuts, he being of opinion that the increase in the number of wells depends on the extension of tank ayacuts, and Mr. Rundall has followed him at considerable length in discussing this question. As, however, the matter was finally disposed of in the Proceedings of Government, dated 29th November 1872, No. 1,628, approving the rules framed by the Board for the guidance of officers engaged in the revision of tank ayacuts, and no necessity has been shown for a modification of the instructions then issued, it does not appear necessary for the Board to say more on this occasion than that they approve the proposals of the Acting Director at paragraph 17. The revision of ayacuts must be carried out on the principles enunciated by the Board and Government, and the Collector is not at liberty to ignore the rules by directing transfers at will. Caution should be exercised in proposing extensions of ayacuts, but the proposals must then be examined with reference to the rules, and must not be arbitrarily set aside. The Deputy Director's proposals for Proddatur, Jamalamadugu, and Cuddapah will be allowed to stand subject to any modification that may be deemed necessary on appeal.

3. Turning to the question as to whether, under existing rules, Mr. Horsley has grounds for his assertion that the owners of wet wells, i.e., wells dug in irrigated land, are not treated with a sufficient amount of liberality, the Board observe that up to a quarter of a century ago if a ryot dug a well and irrigated crops therefrom he was liable to an enhanced assessment on the land so improved, but in 1852 under the orders of the Court of Directors this most unfair impost was abrogated, and the ryots received distinct assurances that in future they were to have the full benefit of their own improvements. To guard, however, against abuses, and to protect the rights of the State in existing sources of irrigation, rules* were framed under the authority of Government restricting the privilege in certain cases. The first of these rules is—

* Vide Board's Standing Order, No. 123.
"That if cases should arise when it is manifest that a well dug at a ryot's expense has drawn away water from a previously existing Government work, in such instance such well land shall not be wholly exempted from assessment, but a fair and equitable extra cess water-rate may be imposed."

4. It is this "fair and equitable extra cess water-rate" to which Mr. Horsley takes exception. If the principle involved in the rule is sound, viz., that where a well derives its supply wholly or in part from a source of irrigation which was in existence previous to the construction of the well, then undoubtedly wells dug in wet lands are liable to the extra cess, inasmuch as many of them derive their supply by surface flow from the work which irrigates their site, whilst it may be asserted of all that they are fed from the same source by percolation. Not to impose some charge in the case of irrigation from these wells would be an act of one-sided liberality, inasmuch as they tend greatly to check the surface flow to the lands situated at a distance from the irrigating source, and if, as is often the case, they are excavated on the borders of irrigated lands and the water is used to irrigate dry lands, the supply to which the lower lands within the registered ayacut have a prior claim is unfairly intercepted.

5. Mr. Rundall points out that, although no allusion is made by Mr. Horsley to any previous correspondence bearing on the subject, it has been discussed on previous occasions, and that the Board have deliberately declined to recommend any modification of the rules with the view of exempting from charge irrigation from wells in wet lands, it being "an indisputable fact that such wells are generally made because their position with regard to the tank assures them a good supply of water, whilst it is almost impossible to discover whether the water for a second crop has been drawn directly from the tank by channels or indirectly by means of wells"—Vide Board's Proceedings, dated 28th October 1872, No. 2,087. The subject was again discussed at some length in the papers recorded in Board's Proceedings, dated 23rd October 1873, No. 2,169, and the Board affirmed the principles already enunciated in the existing rules. Copies of these papers will now be submitted to Government; the Board adhere to the views expressed therein, and see no reason for the enormous sacrifice of revenue which would result from compliance with Mr. Horsley's recommendation that all wells beyond the limit of distance from the tank bund which is now applicable only to wells sunk in dry land, should be free to "irrigate wet or dry or second crop on wet or dry land without payment of water-rate or second crop assessment."

6. Although there is no necessity for any exemption such as that proposed however, Mr. Rundall suggests more liberal treatment of second crop irrigation on wet lands at settlement, and further points out that the existing charge of one-fourth of the wet assessment when a second crop is raised partly by water from private wells was expressly sanctioned only pending the introduction of the new settlement, vide G.O., dated 12th June 1872, No. 928, and that definite orders are now required regarding the charge to be imposed subsequent to settlement. Under the new settlement composition or second crop charge, when the irrigation is precarious, is allowed at one-third and one-fourth of the first crop charge. Mr. Rundall proposes to add a one-fifth rate and to apply the several rates ordinarily as follows: the one-third rate to irrigation from tanks when the supply is precarious, the one-fourth rate to irrigation partly from tanks and partly from wells, the one-fifth rate to cases in which the supply is mainly dependent upon wells. Wherever the supply from any source to different parts of the ayacut varies considerably it will be treated by blocks.

The above rates are to be applied in cases of composition, and Mr. Rundall proposes that when the ryots do not consent to compound the second crop charge should be fixed at one-half, one-third, and one-fourth the first-crop assessment in the cases noted above respectively according to the several degrees of certainty of supply.

He further proposes to dispense with the minimum charge of one Rupee per acre prescribed for Trichinopoly and subsequently extended to Salem so as to admit of the above terms being offered to the lower classed lands, the area of which, however, is stated to be limited,

G.O., dated 5th April 1864, No. 577.

and to restrict the abatement of one-fourth for lift to cases in which the irrigation is solely by lift, withholding the concession when the supply is obtained partly by flow and partly by lift.

7. These proposals appear to the Board as liberal as the circumstances justify, and they recommend their acceptance. The nature of the supply will be noted and recorded by the Settlement Officer and the charge adjusted accordingly.

8. The attention of the Collector is called to the concluding paragraph of Mr. Rundall's letter in which he shows good ground apparently for questioning the accuracy of the tank supply registers maintained by the Village Officers. The Collector should investigate the cases brought to notice and issue such orders as will ensure greater attention being paid to this important matter.

(True Copies and Extract.)

(Signed) C. A. GALTON,
Acting Secretary.

No. 549. Proceedings of the Board of Revenue, dated 4th September 1876.

Read the following letter from C. RUNDALL, Esq., Acting Director of Revenue Settlement, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated Madras, 15th July 1876, No. 2,811-79:—

In continuation of my letter, No. 2,379-58, of the 13th ultimo, I have the honor to submit a further letter from the Deputy Director of Cuddapah giving subject of the revision of tank ayacuts and the treatment of wet lands irrigated by wells.

2. Mr. Gribble contends that paddy alone should be treated as a wet crop and that raggi when irrigated by a tank or well should still be regarded as a dry crop. I cannot speak for certain as to Cuddapah, but in other districts, when the water-supply is short, raggi is occasionally cultivated on the wet lands in place of paddy, and, therefore, when adjusting the wet ayacut, it is justifiable to deal with the fact whether the land is irrigated or not irrigated, irrespective of the question whether the crop irrigated is always paddy or sometimes raggi instead. Moreover, the irrigation of raggi will be found to generally prevail under the more indifferent sources of irrigation, and a set-off for this is allowed in the grouping, whereby a lower assessment is fixed for such lands than for those under more reliable sources of supply.

3. It is clear from what Mr. Gribble states at paragraph 8 that very considerable revision is urgently needed to the ayacuts of tanks in the sub-division. If the lands are unirrigable as a rule, and therefore waste, it will certainly be requisite to make considerable adjustments to dry, and there is really no foundation for Mr. Gribble's conclusion that the lands will be confirmed as wet and charged "double rate," or double-crop rates I presume. The rules provide equally for the transfer of land from wet to dry as from dry to wet, and such revision is essential.

4. It does not follow that the 17,637 acres referred to as under "Dasabandam Tank Ayacuts only" is relinquished area as stated by Mr. Gribble, for doubtless more or less is immemorial waste. Moreover, the extent does not refer to tanks only, but to channels and wells also. At page 236 of his Manual, to which Mr. Gribble alludes, it is stated that 13,966 acres under Dasabandam tanks were unoccupied in 1278 and 14,713 acres in 1282, and it is therefore inferred there is a tendency to relinquish the wet lands under these tanks. According to Appendix F, however, the area is rendered as 13,946 and 13,713 acres respectively, and consequently the unoccupied area has not increased, but diminished during the period, and the conclusions drawn are seemingly mistaken.

5. The area unoccupied on the average during the past five years is detailed, and from the fluctuations observable Mr. Gribble repeats his impression that "the general tendency is an increase in the number of acres relinquished, and the mere fact of fluctuation shows, I think, that even now the ayacuts are larger than they should be, and that whenever a good season occurs the ryot at once takes up land which he relinquishes in the following year." Under tanks there is but little variation save in one year, 1280. The comparison under the different heads is as follows:—

Items.	FASLIS.		Difference.
	1278.	1282.	
Tanks	13,946	13,713	— 233
Channels	2,111	2,830	+ 719
Wells	1,148	1,094	— 54
Total	7,205	17,637	+ 432

The increase is thus confined to the occupied area under channels, and it occurred in Fasli 1279. There must have been some special cause for this, as very little of the land then given up has been since occupied.

6. I can but regard Mr. Gribble's further remarks based on the proportion of the total cultivable area that is in occupation as misleading also. According to the statistics given in his Manual the cultivable extent is 3,533,737 acres, and it is stated that only one-third of this, or 1,225,082 acres, is in occupation. To determine the extent actually in occupation the area held under Inam tenure, 665,975 acres, should be added to the foregoing, making 1,891,057 acres. Half, and not one-third of the total cultivable area of the district, as given in the Manual, may therefore be said to be in occupation. Of the remaining half, probably a good part is not really cultivable, and the bulk of the area may be described as consisting of the poorer and indifferent qualities of soil. The tendency of the settlement is invariably to lower the assessment on the indifferent soils, and hence the new rates applicable to waste lands require, as a rule, to be regarded as more favorable to the extension of occupation than the former, or modified paimaish rates which they supersede. In the three taluqs first settled—Jammalamadugu, Proddatur, and Cuddapah—the proportion of the assessed land unoccupied was only 11 per cent., and in the next three taluqs reported on—Budwail, Sidhout, and Pullempet—30 per cent. There is, of course, other land that has never been yet brought under cultivation.

7. As regards the marked tendency to throw up lands, and especially wet land, I append below a statement compiled from the district returns, as to lands relinquished and taken up during the past five years, 1280 to 1284 Fasli:—

	Dry.	Wet.	Total.
Principal Division.			
Relinquished... ..	16,278	2,337	18,615
Taken up	17,080	3,063	20,143
Difference ...	+ 802	+ 726	+ 1,528
Sub-division.			
Relinquished... ..	20,586	1,756	22,342
Taken up	16,070	1,369	17,439
Difference ...	- 4,516	- 387	- 4,903
Total, Relinquished	36,864	4,093	40,957
Do. Taken up	33,150	4,432	37,582
Difference ...	- 3,714	+ 339	- 3,375

8. As regards the principal division of Cuddapah, there has been no decrease either of dry or wet occupation. In the sub-division there has been a falling off of 3,714 acres in dry and 387 acres in wet; but, as the cultivated area exceeds five lakhs of acres, the extent is inconsiderable.

9. The falling off in the wet is the main question that Mr. Gribble raises, and the foregoing details, though they do indicate a slight decrease of 387 acres in the subdivision, can hardly be regarded as supporting the Acting Collector's view of the question.

ENCLOSURE No. 1.

From J. H. M. COX, Esq., Deputy Director of Revenue Settlement, Kistna, Kurnool, and Cuddapah Districts, to C. RUNDALL, Esq., Director of Revenue Settlement, Madras, dated Cuddapah, 21st June 1876, No. 531-218.

At the Acting Collector's request I have the honor to send you, herewith, a copy of the letter* which he has written to me with reference to mine to you, dated 19th ultimo, No. 417-165, on the subject of the revision of wet ayacuts, &c., in this district, and, in doing so, beg to make two or three remarks on the same.

2. Paragraph 3.—Mr. Gribble argues that, because in the table of rates adopted by the Irrigation Company, rice is included in the same head as sugar-cane, &c., and charged more than garden raggi, garden korra, &c.; the latter should not be classed as wet. In the Government water-rate table I observe that rice is charged less than sugar-cane, &c., and the same rate (4 Rupees) as that fixed by the Irrigation Company for the garden crops above referred to. I do therefore see the great hardship in this case, particularly when no charge is made for a second crop under wells, which are the sources under which these crops are generally grown.

3. Paragraph 4.—The mere puddles of tanks in the sub-division to which Mr. Gribble refers are those the circumstances of which I have already proposed should be considered to see whether they might not be abandoned and the lands under them transferred to dry, in which case, of course, the wells would also not be chargeable.

4. Paragraph 5.—The assertion that the Tirumajasti lands were held by rich and influential ryots was not mine, but Mr. Horsley's (vide paragraph 5 of his letter of the 24th February, No. 47, to the Board).

5. Paragraph 6.—I explained in paragraph 1 of my letter why I thought that in this case an exception should be made and the benefit lie on the side of Government. If the benefit were given to the ryot I considered that it might lead to evasion of assessment, and that he was quite able to represent any injustice that might be done while the fact of any extent of ayacut being left waste would at once attract the attention of the Revenue authorities and lead them to make an inquiry into the matter.

6. Paragraph 8.—The figures adduced by me himself admit in paragraph 9 the circumstance from those of the main division so that his argument expect that the ayacut in the sub-division taluq I fancy, be found to be much the same as those of the Arcot District, where the features of the country

able refer to the sub-division taluqs and as that part of country are quite different there cannot, I think, at all apply. I quite require reduction, their circumstances will, tanks in the northern taluqs of the North are similar.

ENCLOSURE No. 2.

From J. D. B. GRIBBLE, Esq., Acting Collector of Cuddapah, to J. H. M. COX, Esq., Deputy Director of Revenue Settlement, Cuddapah, dated Madanapalli, 10th June 1876, No. 36.

I HAVE the honor to acknowledge the receipt of a copy of your letter, No. 417-164, dated 19th ultimo, to the address of the Director, to thank you for thus affording me an opportunity of making some remarks on points which I venture to disagree with you.

2. I find that the changes alluded to in paragraph 4, which have been made in the receipt of a cultivation statement for ten years, have been made by Mr. Horsley after almost all cases where Mr. Horsley objected to the extension of ayacuts, it was found that the field entered by the Settlement Department was actually cultivated with "wet crops" had in reality been cultivated with dry crops, such as korra, horse-gram, and occasionally only paddy. It is, of course, possible that these accounts may be incorrect, but they are supposed to be drawn up from the village accounts, which formed the basis of the annual settlements, and it would be therefore dangerous to impugn their veracity. You will remember one case in which the ten-year account signed by the village officials differed considerably from an account drawn up by the Settlement Department, which also was signed by the village officials. The village officials in this case were called upon to explain why they had signed contradictory accounts, and in reply stated that the account given to the Settlement Department was incorrect. This matter is still under inquiry.

3. The gist of the whole matter is what you letter you say garden crops grown with the help of water have been considered by us to all intents and purposes, as not *bona fide* dry crops, but charged wet assessment. It is true that I cannot agree that *therefore* they should be charged wet assessment. It is nothing between, but I think an intermediate rate should be fixed. On turning to the rules of the Irrigation Canal Company I find there are four kinds of crops with three different rates of assessment.

1. Crops requiring continuous supply, first crop	RS. 6
2. Do. do. second crop	6

Under this head are included only rice, sugar-cane, betel leaves, coconuts, plantains, saffron, and fruit trees.

3. Crops requiring frequent floodings	RS. 4
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Under this head are classed garden raggy, garden korra, garden onions, chillies, sweet-potatoes, tobacco, indigo, and brinjals.

4. Crops requiring occasional floodings	RS. 2
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field raggy, field korra, field chillies, field tobacco, cotton, grain, and oil seeds. Korra, raggy, and gram pay therefore a considerably lower assessment than rice, but under the system adopted by the Settlement Department they are made to pay exactly the same assessment, and their cultivation brings a field under the head "irrigable" as a wet crop." This, I submit, is scarcely just, and it was for this reason that I believe Mr. Horsley made so many objections to the extension of ayacuts in the B Statements.

4. In the case of wells, I admit the culty under which the whole question labors. In paragraph 6 you say: "The objections are to the lands under Doravu, Dasabandam, and Itafak wells being classed as wet, is that they do not and cannot grow wet crops, i.e., paddy. This may, as a rule, be said of all wells, and I have explained both to Mr. Horsley and Mr. Gribble that in we have not registered the lands altogether with reference to the crops grown on them, but in consideration of their receiving water from a fairly trustworthy Government source." It seems to me that if a well "does not and cannot grow" a wet crop it is unjust to make it pay a full wet assessment, whatever be the source it gets its water from. As a matter of fact, however, these wells depend very little upon the tanks below which they stand. During this year numberless cases came to my notice during the settlement of the Voilpad Taluq, in which a tank had received absolutely no water whatsoever, but yet a large portion of the ayacut raised wet crops from the wells. In other cases, long after the tanks had run dry, the irrigation was continued from the

wells and the crop raised. There are, in the district, to my certain knowledge, 46,904 wells, and there may be many more, of which I have not been informed. I am not quite prepared to endorse the statement that wells do not add to the cultivation of the district, but I am confident that in thousands of acres which now grow paddy, and pay a wet assessment to Government, a wet crop would not be raised were it not for the wells. These wells are, for the most part, situated in the valleys where the tanks also lie, and it is often urged that, because they are in the midst of wet cultivation, they must gain a certain supply of water owing to the percolation from the irrigated fields around them, and therefore they should pay a wet assessment, since the water which percolates is from a Government source. This is partly, but not entirely true. The wells are dug in the drainage basins for the same reason that the tanks are built there, because water is available, but they are also dug there so as to prove a help to the Government tanks when their supply runs short. As long as the tank is full and the fields around are irrigated, some water no doubt percolates into the well, but what is to be said when in a year like this the tank is empty and the well is full. This is especially of importance in the sub-division taluqs (to which the settlement has not yet come) where there is an immense number of tanks (4,291), the majority of which are mere puddles, out of which the water speedily evaporates, but which nevertheless succeed in raising a small wet crop, in consequence of the aid given by the well. As far as I understand, what Mr. Horsley maintained (there I fully agree with him) was that if, when it is found that these wells have raised wet crops (which seem to include almost every crop which requires water) in lands beyond their registered ayacut, these lands are classed and charged as wet, it will be unjust. At present such lands pay a dry rate, 1 Rupee plus Tirwajasti rate Rupees 3 or 4 minus one-fourth for lift, when classed as wet they will have to pay double. At present it is not usual to allow remission for ayacut lands left fallow. If Tirwajasti lands are cultivated unless good reason can be shown, so that I do not think that the Government lose much by the present arrangement, which, though it gives additional labor to the settling officer, is in my opinion more just to the ryot.

5. I am not quite prepared to say that the ayacut lands are usually held by the poor ryots, and the Tirwajasti lands by the rich and influential ones (paragraph 13 of your letter), often the reverse is the case; were it so, when these Tirwajasti lands are classed as wet, the state of things would be no different than it has been hitherto, and there could be no reason for the "other ryots" to call out or relinquish their lands for want of water, for they would be no worse off than they were before. If, however, the effect of increasing the ayacuts should be to cause ryots to relinquish their lands, it is clear that the wet ayacuts will have been increased beyond their capacity of supply. You state, however, (paragraph 13) "an inquiry might then be made into the matter and the necessary changes carried out." This is true, but such an inquiry would in reality be doing the whole work over again, for here we have to deal with 46,904 wells and 4,972 tanks.

6. I see that there are many difficulties in the way of a scientific measurement of the capacity of each tank, but this I feel sure is the only true way of settling the question. I venture to differ from you (paragraph 14) that "there must and will be errors of judgment, and where this is the case, it seems preferable in instances like these that the benefit should not be altogether on the side of the ryot." It is, of course, a dangerous thing to lay down a sweeping rule, but, if one is to be laid down, I am inclined to exactly the opposite, viz., that in all cases of doubt or error the benefit should be given to the ryot.

7. It is, of course, quite possible, as you say in paragraphs 17 and 18, that the rain accounts are not always quite trustworthy. In the instances you cite they may have been incorrect, but I can confidentially affirm that since I have been in the district, I have seen numberless cases exactly similar to those cited by Mr. Horsley, where I have, with my own eyes, seen the tank empty and the crops watered solely from the wells.

8. Regarding the general question of decreasing instead of increasing the ayacuts, I would cite one example, which will, I think, bear out Mr. Horsley's opinion that they should not be increased. I allude to the tabular statement quoted on page 236 of my Manual, which shows that there have been relinquished and are now lying waste 17,637 acres, assessed at Rupees 88,231. These are wells which supply water to dry lands and pay a small rate of from 4 to 5 Rupees. These lands will now probably be classed as wet and charged double rate, and the ayacuts already partly relinquished will be nominally increased. I would beg you to refer to Appendix F on page 331 of my Manual, which shows the actual number of unoccupied acres under Dasabandam tanks, channels, and wells in the subdivision for each of five faslis ending with Fasli 1282.

The figures stand thus:—

Fasli.	Number of Acres.
1278... ..	17,205
1279... ..	17,319
1280... ..	15,861
1281... ..	17,219
1282... ..	17,637

These figures show a considerable fluctuation, and wells are very nearly the same for in the number of acres relinquished, as the ayacuts are larger than they show once takes up land, which he relinquishes is one of grave importance. Out of 1,225,082 are cultivated, and only that a settlement, the tendency of the cultivation of these waste acres those of Munro's pymaish, but it is force for sixteen years, and the Government reduced them by 25 and 33 per cent. total assessment than the old pymaish reduced by Sir Thomas Munro when the price of labor, production, living the ryot profits from the increase whilst he has to pay an increased settlement must be a rise in the lands. At present there is, as monthly statements of sales of arrears of a year's kist are shown.

9. I feel that some apology has arisen in the main division settlement, however, will score I presume, be carried out the ayacuts were founded on a every village and tank. My founded on some local knowledge Mr. Horsley's. These objections scarcely dare hope that they be reconsidered before any in the subdivision.

SUBMITTED to C
September 1876, No.

2. The Board's Proceedings quoted in manner in which the ryots that the determination depend upon the extent of the crop raised. and approved in G

No. 550.

Irrigation, No.

individuals in wet lands in 2. His Grace the Governor under investigation by the therefore resolves to require recorded above may be brought and that at the same time specifically reported.

unoccupied cultivation in the district only in occupation. I cannot think that the new rates are lower than after these pymaish rates had been in them. Sir Thomas Munro himself ment, however, though showing a less higher settlement than the one introduced by 25 and 33 per cent., and this after enormously increased. It is true that gains a profit only on the grain he sows, and other things. The great test of a just and the bringing under cultivation of waste marked tendency to throw up lands, and the selling price of land is very low, and that the sale of a field.

subdivisions figure regarding a question which instances of the subdivision are so different. The vision, and the principle once established, it will, Mr. Horsley's objections to the increase of the district and an intimate knowledge of almost asked by such an experience as his, but they are queries, and have been formed independently of some claim to consideration, and, though I would earnestly ask that the whole matter may result in an increase of the ayacuts especially

Copy.

(Signed) J. H. M. COX,
Dy. Director of Revenue Settlement.

minutes of Board's Proceedings, dated 1st

modifying the views already expressed in the notice to the remarks of Mr. Gribble on the ryots is being conducted, the Board consider the classified as "Wet" and "Dry" must be ordinarily be supplied, not on the nature nunciated by the Board after full discussion November 1872, No. 1,628.

copies and Extract.)

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

26th June 1877, No. 2,110.

In these papers the question of the treatment of lands irrigated by wells constructed and maintained by private persons is fully discussed.

Mr. Horsley in Council observes that the whole subject is under investigation by the Government (G.O., 15th January 1877, No. 157-A), and he therefore resolves to require the points submitted for decision in the papers with the reports now expected from Collectors, and that at the same time involved in Mr. Horsley's proposals may be

7, No. 2,110.

gs into special promi ce the
nt subject.

their views upon an aspect of the
d attention, viz., the legal right
om surface flow. It is under-
are is no separate property in
hich it is found.

C. G. MASTER,
Secretary to Government.

Government.
stood that the
subterranean water b

To the Board of Revenue.
,, the Director of Revenue Settlement.
,, the Public Works Department.
,, the Financial Department.

Ed. L. F. Zephir and T. O'Connor.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 28th October 1872.

Read the following letter from E. STORR, Esq., Sub Collector, to the Collector of Cuddapah, dated Madanapally, 19th September 1872, No. 299:—

In acknowledging the receipt of Board's Proceedings, No. 1,663 of August 22nd, 1872, with the Draft Rules by the Director of Revenue Settlement for the revision of Tank Ayacut, I have the honour to submit the following remarks, which I request you will forward for their consideration, as I am very anxious that this revision, which will probably be at once commenced in the sub-division, should be as complete as possible.

2. In paragraph 3 of the Circular, it is stated that "it has been ruled by the Board that these enquiries are not to extend to Inam lands which should be left as they are." • So far as I can gather from the Board's Proceedings of May 10th, 1872, No. 746, this ruling was only intended to refer to the rough revision to be undertaken by Collectors, and not the more thorough one by the Settlement Department. All that the Board say (*Vide* paragraph 8, Clause 3 of the above Proceedings) is that the revision must not include Inams *which have been already finally settled*. This surely applies only to Inams which have been settled by the Inam Commissioner, and not to Village Service Inams which have not been touched.

3. In the near prospect of the enfranchisement of these Inams at five-eighths of their assessment, I think it is very advisable not only that they should be re-classified when necessary into wet and dry in the same way as Government lands, but also that the nominal assessment on these lands, which is, in many cases excessive, and in almost all cases very unequal in its incidence, should be revised at the same time.

4. I am led to mention this latter point as I am informed by the Tahsildars that no classification of Service Inams has been undertaken by the Settlement Department, and if this is the case, the present time will be a good opportunity for carrying out this revision. I see that Mr. Pelly in his scheme for the revision of Village Establishments contemplates these Inams being placed on the same basis with respect to assessed value as the Circar lands, before they are enfranchised, and Mr. Rundall in paragraph 24 of his letter, printed with the Board's Proceedings No. 746 of May 10th, recommends that they should be included in the General revision of Tank Ayacuts as well as re-classified before enfranchisement.

5. Many of these lands bear a nominal assessment of Rupees 20, and some even Rupees 30 per acre, and of course it will be no compensation to the Inamdars to enfranchise them at three-eighths of this assessment. They would be better off holding them at the full Circar assessment, the highest rate for which in the richest taluqs of the district will be virtually only Rupees 10 per acre, under the new Settlement.

6. *Paragraph 5 of Rule XVI.*—As regards the classification of lands in tank beds as wet, I think an exception should be made in those cases, when the tanks are hopelessly ruined, and where the beds are, to all intents and purposes dry lands. The giving of such lands on putta has been forbidden by Board's Proceedings of January 11th, 1872, No. 85, but where the lands have already been given on

virtually dry rates, and where there is no chance of their ever receiving a supply of water, arbitrarily to class them all as wet, and charge a wet assessment would be felt to be a harsh measure.

7. *Paragraph 3 of Rule XVII.*—By this rule it is ordered that dry lands which have been cultivated with wet crops simultaneously with the adjacent registered wet fields *under any source of irrigation* should also be classed as wet. I presume that wells are not intended to be included in the words "any source of irrigation" otherwise a large number of dry fields will be improperly classed as wet.

8. *Rule XVIII.*—Directs that lands upon which a second crop is raised by means of wells dug at the ryots' expense, provided these wells are in the tank bed, or in the Nunjay land under the tank, are to be classed and assessed as double crop lands on the ground that the wells derive their supply from the main source.

9. As regards wells dug in the tank bed, the rule is a fair one, but to apply it strictly to wells half a mile away from the tank bund, and to charge them the full Fysaljasty, or half the ordinary assessment, will place the ryots in a worse position than they are in now. By Government Order, No. 928 of June 12th, 1872, on Board's Proceedings No. 85 of January 11th, 1872, the charge for a second crop raised partly by wells has been reduced to one-fourth of the assessment. This arrangement it is true was a temporary one pending the introduction of the revised settlement, but the principle on which it was granted, viz., that it was not equitable to charge ryots at the same rate for water drawn off from a tank or channel, and for water raised at their own cost, from wells dug at their own expense, remains the same.

10. Wells beyond a certain distance from the waterspread of a tank do not affect its supply in any way, and to class and assess as double crop lands, those which are watered by wells only, and do not receive any supply from a Government source, appears to me hardly fair. I know of some instances in which two crops have been grown for years on so-called wet lands, but which have received water solely from the ryots' own wells, and without the assistance of which no crop whatever could have been raised.

11. *Rule XXVII.*—States that as in the case of the other Inams the Daswundams should remain as heretofore, though Government lands irrigated by the Daswundam tank or channel may be adjusted under the foregoing rules.

If this rule is to be strictly carried out, and the Daswundam Inams left as they are, a large proportion of the wet lands will be left unrevised as about two-thirds of the 5,000 tanks and channels in the sub-division are, what are called, Shamilat Daswundams.

12. These Shamilat Inams have no particular locality, but consist of a deduction of assessment of from one-eighth to three-fourths of the cultivated area under the tank or channel.

I see no reason why the fields containing these Inams should not be re-classified, in the present revision. The Daswundamdars have no priority of claim to water over the other ryots, and I cannot see that their position will be in any way affected by merely altering the classification of the lands to wet or dry as the case may be, when such re-classification is not to affect any right they now possess to water when available.

On the other hand, it will be considerably to the interest of Government to throw open to dry cultivation at reasonable rates, wet lands now left uncultivated from their high assessment.

13. There are no cases in the sub-division similar to those mentioned as existing in North Arcot by Mr. Randall in paragraph 21 of his letter accompanying Board's Proceedings of 10th May 1872, where the liability of the Daswundamdars increases in proportions as the area cultivated falls off. The only cases (and there are few in number) where the liability of the Daswundamdars would be at all affected by the extent of cultivation, are those in which what is called a Hungami Jodi, or temporary quit-rent has been fixed on the Inams. This is payable only when the numbers on which it is payable are cultivated, and as it may reasonably be expected that many of the so-called wet lands now yearly left waste will be cultivated with dry crops when the assessment is reduced, the Inamdars might complain of having to pay a Jodi for dry cultivation, which was originally calculated on the produce of wet lands.

14. Some concession might however be made to them on this score, or if it is thought inadvisable to alter the old Jodi, such Inams might be left as they are, but to exclude all the Shamilat Daswundam fields from the present revision, will cut off a large area of land from the advantages which will certainly in time be gained both by Government and the ryots from the new classification of lands according to their real capability of being irrigated or not.

No. 160.

SUBMITTED for the consideration of the Board of Revenue.

PULLAMPETT,
25th September 1872.

(Signed) A. J. B. ATKINSON,
Acting Head-Assistant Collector,
for Collector.

THE Board's ruling that the revision of tank ayacuts should not include settled Inams was of general application. When an Inam title-deed has once been issued it is not expedient to disturb it because the land or some of it is wrongly classified as dry or wet. Moreover when the Inam Commissioner decided that an Inam now supplied with water was *dry* it was because the supply was created after the Inam was granted.

2. Village Service Inams have not been enfranchised except in Godavery, Kurnool and Trichinopoly, but the Board believe that title-deeds for such Inams in Bellary and Cuddapah have been prepared and are signed and sealed though kept in abeyance. It is necessary in Cuddapah where the inequalities of assessment are great and very desirable in Bellary that the quit-rent should be re-calculated after the Inams have been assessed by the Settlement Department, and in determining the assessment the classification of the land as wet and dry must be revised. The Inam Commissioner will be requested to favour the Board with his opinion on this subject.

3. Mr. Storr is mistaken in supposing that the Settlement Department have not dealt with Service Inam lands so far as to enable them hereafter to determine what would be the assessment on them if they were Government land.

4. Mr. Banbury's instructions as to classifying land in tank beds does not refer to ruined tanks.

Rev 393/5

5. In Section 17 Clause 3 of the instructions he refers to dry lands irrigated from the same source as the adjacent registered wet fields.

6. The question whether the rule that "second crop" is to be charged for when it is grown with water obtained from private wells in wet land is an important one involving a very large amount of revenue in most of the districts. It is an indisputable fact that such wells are generally made because their position with regard to the tank assures them a good supply of water, and that it is almost impossible to discover, when there is a dispute, whether the water for the second crop has been drawn directly from the tank by channels or indirectly by means of the well. There may be some cases of hardship but they must be few in number and the interests of the State require that the rule should not be relaxed.

7. The way in which Shamilat Daswundams should be dealt with at the Settlement is under discussion, and a report on the subject has been called for from the Collector of Cuddapah. If the Inamdar is still to be paid by a share of the out-turn of the wet cultivation under his well it is clear that a revision of the ayacut will affect his interest unless he is allowed his share of the outturn on the dry land irrigated from the well when the whole ayacut is occupied.

(A true Copy and Extract.)

(Signed) J. GROSE,
Secretary.

To the Collector of Cuddapah.
.. the Inam Commissioner.

Copy to the Director of Revenue Settlement.

Exd. G. A. Turton.

Rev 28/3765/76
Jo 26.6.77 V. 2110.

Tank ayacuts — Order issued on letter from Sub-Collector of Cuddapah regarding revision of.

Received

OCTOBER
No. 2, 1872.

PROCEEDINGS, 28TH OCTOBER 1872, No. 2, 1872.

Encl.

BOARD OF REVENUE,
MADRAS.

1872.

No. 2,169.

PROCEEDINGS OF THE BOARD OF REVENUE, 23rd October 1873.

Read again Board's Proceedings, dated 30th April and 1st July 1873, Nos. 687 and 1,146.

Read also the following letter from G. BANBURY, Esq., Director of Revenue Settlement, to J. GROSE, Esq., Secretary to the Board of Revenue, dated Pattraperumudur, 31st July 1873, No. 1,593-A.-62-A. :—

I HAVE the honour to reply to Board's Proceedings, dated 30th April last, No. 687, regarding the liability of certain dry lands in the North Arcot District to be charged with water-rate.

2. The questions raised by Mr. Wilkinson stand thus :

1st.—If the water of a well in wet land is used for the irrigation of an adjoining dry field should water-rate be levied or not?

2nd.—If a well in a dry field is within ten yards of a wet field should water-rate be levied in case the dry field is irrigated by such a well?

3. The present doubts and present correspondence seem to have arisen mainly from Mr. Wilkinson having, in his good-natured endeavour to be generous to the ryots, been hardly just to the Board or myself, as he has misconstrued their orders and misquoted my words. By considering this latter point first we dispose of Question No. 2 at once. The rule agreed upon by Mr. Whiteside and myself runs as follows, and is in reality very different from the meaning now given thereto.

The words as they really stand—

As represented by Mr. Wilkinson—
"Mr. Banbury suggests that water-rate should be charged for all lands irrigated by wells which, though 'situated in dry land, are within ten yards of wet land'."

"Wells on dry land within ten yards of wet lands have not been charged, although, as Mr. Farmer says, the well is merely 'a ruse' to prevent assessment

being charged, as the tank or channel water would run on to the neighbouring dry land direct without any well irrigation. Where the water can flow in this manner and the well is only a pretence, tirvajasti should be charged under Board's Orders No. 123, paragraph 3, Column 1."

It will thus be seen that no charge was made, nor was intended to be made, upon irrigation from these wells, unless they were a mere subterfuge to obtain direct service from the Government source gratis; or unless they were filled, as in some cases explained by Mr. Randall, by water flowing thereto from the wet fields hard by. This rule seems fair and is in consonance with the Board's Orders, so thus, I think, matters must remain, unless some vital change in the present procedure be contemplated.

4. The remaining question of charging for wells in wet lands hinges upon the construction to be put upon the Board's Circular Orders on this subject.

The practice of charging tirvajasti for these "lopala bhavulu" in Nellore and elsewhere is clearly supported by Clause 3, paragraph 3, of Board's Circular Order, No. 123, which runs thus: "Wells in *unirrigated* land shall not be exempt from extra assessment if within ten yards of a tank bund," &c. The natural inference from which is that wells in *irrigated* land are not to be exempt under any circum-

stances. Messrs. Sewell and Wilkinson seem to be of opinion that when the Board say specially "unirrigated lands" they really mean also "irrigated." But I must confess I do not read the clause in this light, nor is it the usual interpretation thereof. Mr. Wilkinson fortifies his position by urging that by a subsequent clause

* Vide paragraph 3, Clause 6 of Standing Circular No. 123. the exemption extends "to wells* of all descriptions," thereby including wet.

But the whole question is regarding "wells in unirrigated lands," and the "description" refers evidently to their kind or

sort, whether in fact they are of stone(1), or brick(2), of pottery(3), or basket-work(4).

Were anything further required to show that the Board said what they really meant, it is to be found in paragraph 8 of Mr. Randall's letter, herewith forwarded, which shows that, although the above quoted

order was modified† by the following words, "no additional assessment being leviable on account of wells sunk in wet

lands," this modification had soon to be cancelled, and the above sentence struck out; matters being left as they originally stood, and wells in unirrigated alone exempted.

In addition to the above, I have no doubt for the following reason that the Board intended the order to be read as it is written and to apply to only wells in dry land. The rule was framed in 1855, shortly after Mr. Edward Maltby was summoned to the Board from South Arcot, where he and his Head Sheristadar, Runga Charry, had just been much occupied in fully overhauling the question of "Kussur," as "Tirvajasti" is there called, and seeing that all demands under that head were brought to account. It is, therefore, hardly probable that with this question fresh on his mind, Mr. Maltby would have sanctioned a measure calculated to give room for wholesale evasions in this very item of revenue.

5. Having thus disposed of the *quasi* legal aspect of the rule, it becomes necessary to consider its equity and fairness. I need hardly state that the tank is in point of fact the *raison d'être* of the wells situated beneath it. These wells receive the benefit of the storage in the reservoir, although they may be situated far away from the bund itself. Thus to give a homely illustration, I may mention that when examining some of the Chembrumbaukum Villages eighteen months ago, I was told that the tank influenced the supply in the wells as far off as at Kodumbaukum, where the hounds meet. This, no doubt, is the reason why wells are so common under tanks, but so rare in the Nirarumbum tracts under channel irrigation. But Mr. Clogstoun, the Deputy Director in Salem, has put this point so clearly that I cannot do better than give his own words:—"As regards the assessing of dry fields irrigated by a well situated in nunjah land, the invariable practice of the district is to charge a water-rate. Nor does it seem to me that there is any injustice whatever in such a course. The question of justice or injustice naturally turns upon the point whether the presence of the water in the well is, or is not wholly or in part due to the presence of the Government irrigation work and to the channel which feeds it, and to which the Government has an exclusive right. I myself would

answer the question in the affirmative, and I venture to think that very few of the ryots most interested would differ from me. As a matter of fact a very large number of the so-called wells, are not wells at all. They are simply large pits into which the water of the tank flows. If this statement needs any proof, it will be found in the fact that when the tank under which the wells are situated is breached, there is no water in the wells, or if any, it is very low. The indebtedness of these wells to the tank is again seen in the speedy manner in which a tank is drained in a few days to fill them up. The capacity of some of the wells in question is enormous, and when a large number of these wells exist under a tank, the quantity of water required to fill them is very considerable, and this water is abstracted from the general share to the detriment of those ryots who have no wells.

It is the latter consideration which, supposing the views I have above stated to be correct, may be allowed chiefly to guide us in determining whether a point may not be stretched in favour of the ryot, and the permission accorded to him of using the water of his nunjah well free of charge for the irrigation of his dry land. Such a concession, would, I am convinced, be contrary to the general interests of the cultivators of wet land, for while the general stock of water would be appreciably lessened, only those individuals would profit who held wet lands bordering on dry. The amount of water that might be taken to dry lands from one single well which has nearly the whole water of a tank to fall back upon is manifestly enormous. The concession in short would be detrimental to the interests of the majority of cultivators under any irrigation work of any size, and would invariably be detrimental to the interests of Government. It is a concession quite uncalled for, and one which I think it most inadvisable to grant."

6. What Mr. Clogstoun says about the breached tanks is doubtless correct, as I remember giving over a ruined tank in the Perambaloor Taluq of Trichinopoly to the ryots, which they repaired without constructing anything like a sluice, as the storage was to benefit the wells not to flow directly to the fields. Again, cases must be rare in which crops, or at all events "wet" crops, are really brought to maturity on dry lands by the "lopala bhavi" water alone; for it is to be remembered that for a good portion of the year these wells in wet land cannot be worked, as they are filled flush with the surrounding irrigation. In fact when I saw these "lopala bhavulu" in Chendragherry, which gave rise to the present discussion, there was neither pretence nor capability of their irrigating the dry lands, the wet crops on which were being matured by percolation and flow from the adjoining wet fields. These crops, when Mr. Randall and I saw them at the beginning of December, were of about three months growth, whilst the "lopala bhavulu" which it is now advocated to exempt could not, as above explained, have been worked for the preceding two months, nor could they be used for the ensuing six weeks even supposing no rain fell in the interim. Whence then comes the water required during this period of at least three and a half months, except by percolation and direct flow?

7. I can hardly agree with Mr. Sewell that "the ryots will feel discouraged to improve their lands by construction of wells at their own cost if they are not allowed to reap the benefits of their own improvements in the cases brought to light

in this letter." If the ryot really wishes to dig a well in his dry land fair and above board, he can do so freely enough and be charged nothing, but if he comes slyly filching Government water, it is certainly proper that he should be made to understand that it cannot be done. It is in a word trickery, not industry, that the rule comes down upon.

8. As regards the practice prevailing in districts in which the settlement has been in progress, the procedure is given below. It must, however, be borne in mind that not only are the cases of "dry" lands watered by wells in "wet" comparatively rare, the water being generally supplied to the neighbouring wet fields, but that it is likely the Board's Orders thereon have, in some instances, been lost sight of. Thus one Tahsildar, when asked what was the course followed, told me candidly enough "It is a point to which I have not paid much attention."

NELLORE AND SALEM.—In these districts the charge is made, the Board's Orders being read as they stand.

KISTNA.—Mr. Cox says "wells situated in the middle of the wet ayacuts are only used to supplement the water-supply from the tanks. In a few cases in Vinukondah where such wells water dry lands, the latter are charged with wet rates; but, in other instances, where the wells only border wet cultivation, only the dry rate is charged."

TRICHINOPOLY.—Mr. Pennington writes that although it is stated that there are no cases of this kind, still he thinks some "must exist," and that he should charge them as in Nellore.

SOUTH ARCOT.—As I already stated there are hardly such things as "lopala bhavulu" in the channel irrigated tracts settled by us.

GODAVERY.—Mr. Foster replies that "no water-rate is charged in any case on lands irrigated from wells, if they are not sunk within the prohibited distance (ten yards) of a Government tank or channel. It is presumed by this that in the Godavery, to be a "lopala bhavi" in the Nellore sense of the word, the well must be within ten yards of the bund; but this is manifestly wrong, as even supposing the reservoir be small, the wells will be indebted thereto for their supply at one hundred times this standard distance from the embankment.

CUDDAPOH.—Major Stuart reports that no charge is made, but that "instances in which the water is used for the irrigation of an adjoining dry field are very rare," and such is the case no doubt, as in Cuddapah these wells are really "Kumak" or auxiliary to the tank-supply to wet lands alone.

9. Mr. Wilkinson, in paragraph 8 of his letter, brings forward very appropriately the case of second crop being charged by Board's Orders on wet lands when irrigated by "lopala bhavulu," and says "it may therefore be urged that much more should water-cess be charged when the water of such well is taken for dry land," but that the Board passed these orders "to avoid dispute, not because the well was situated in the wet area." But this is hardly I think the exact state of the case, as the Board had just about that time been considering the case of the Chembrubankum Tank, where the ryots by the outlay of 8 or 9 Rupees on a "warai* kinar" had managed to

* Parthenware Well.
the Government had just laid out large sums in repairing the reservoir and thus

securing water for maturing this second harvest. No doubt in some cases this rule may be hard, but I remember that Mr. Puckle, who is certainly never exacting, was, in order to prevent wholesale evasions, obliged to support it in the Kadarumbum Taluqs of Trichinopoly, though his inclinations tended otherwise. In fact, in passing these recent orders, the Board merely reiterated what they had recorded* regarding

certain changes in the North Arcot
* Board's Proceedings, dated 8th March 1855, Hookumnamah, and which alteration on this point runs thus:—

"It is the rule when a second crop is raised on one crop, nunjah land watered by tanks, &c., jointly with private wells, to remit one-third of the second crop, nunjah teerwah, as a compensation for the labour of raising the water; this rule is abolished, and in future the full second crop nunjah teerwah will be levied in such nunjah land under a tank or channel, *however it may be irrigated.*"

10. As far as I am able to form any opinion, it certainly seems to me necessary that the rules regarding water-rate should be strict, for not only is the water itself highly prized, but it is from this charge for water that the State must, to a considerable extent, look for a return in the shape of interest on the sums annually expended in the up-keep and construction of irrigation works. With rising rates of materials and labour, it will not do to be over-liberal as to the charge for water, or there would soon be no possibility of constructing or repairing a work that would yield interest on the capital expended thereon.

To take a lower view.—As regards "second crop" and "water-rate," the evasions are, it must be admitted, more or less extensive in every district, and it certainly is not good policy to foster and enhance them by making the rules more indulgent. In reality, I hardly think that the Board have any cause to apprehend that the rules as they now stand would in reality press hardly, were they carried into effect over the whole Presidency, as they have been in Nellore. For practically, however strict the head of the district may be, when it becomes a case of "pull Collector pull cultivator," the latter now-a-days gets so far the best of the tussle that the hands of the former require strengthening rather than weakening.

11. Again, a considerable change is perceptible in the views and proceedings of Revenue Officers of the present day, as contrasted with those of years gone by. The Head Sheristadar, the great local authority in those days, was wonderfully keen and careful in all that appertained to the beriz of his district in which both he and the Collector took a personal pride. The English Revenue Officers had also a kind of mild D. P. W. training; we repaired tanks, built sluices, and constructed tunnels (how mine ever stood has been a marvel to me to this day), so that we were apt to take a very practical, and by no means a theoretical view of the manner in which water-rate should be levied. Now the whole state of affairs is changed. The English Officers have less tent and more office work, the Head Sheristadar's position and authority no longer exist, the district is cut up into small portions and each officer can do pretty much as seems good in his own eyes, so here again is a reason why the rules which regulate our Land Revenue procedure should be strict and explicit.

12. To support this view of the case, I may mention that when examining some of the villages in Chendragherry with Mr. Randall, where our work was in progress, I found that the Board's Orders as to exempting "own wells" and other concessions had been taken great advantage of, the facts having no doubt been misrepresented to the local officers. Thus rich double crop wet lands irrigated by spring channels from the Soornamooky, which had been highly assessed nunjah ever since we held the district, were in some instances summarily brought to dry at Rupees 1-8-0 per acre. In five or six cases spring channels which had ever been Government sources were given away to the ryots, and the hitherto highly rated wet lands altered to "dry," because the usual "Kudimaramut" was construed into "own improvements" which the ryots were to have the benefit of. Under this view of the case all the "Kasham kalways," "Munday kolams," and "Talla varichis" in the country might be given away as private sources and the revenue diminished by hundreds of lakhs.

13. With reference to the subsequent Proceedings of the Board, dated 1st instant, requesting my views on four special cases in which Mr. Wilkinson and Mr. Randall differ as to the charge for water-rate, I give a brief abstract of the

* Mr. Randall's letters go so fully into the questions at issue that I forward them in original, and request their return. merits of each case as gathered from the letters* and "Sawalputti" enclosed. It will be seen that the evidence is sometimes rather conflicting.

Survey No. — as shown in Sketch No. 36.†—Both officers agree that the well

† Enclosure No. 4.

Survey No. 37.—Mr. Randall's examination shows that the channel water flows into the well, that tirvajasti was charged for Faslies 1279, 1280, and 1281 on second crop, and on first and second crops for 1282, the well being situated in the land on which tirvajasti was charged, and that the pond situated in "peramboko" is also used as a source of supply.

Mr. Wilkinson records that the pool is situated in puttah land, and thus exempts apparently everything. Says also nothing as to previous charge for tirvajasti.

As the facts stated are so opposed to each other, and as tirvajasti seems to have been charged by Collector formerly, it will be best to let Mr. Whiteside settle this, and his decision can guide our entries. I learn, moreover, from subsequent inquiry that this pool which has been recently constructed to catch the water of a hill stream is not "situated in puttah-land," only the *bank* being thus circumstanced, as the waterspread is in Government waste.

Survey No. 40.—Mr. Randall says the two wells in Minor Fields A and B are in land which must, under Board's Orders, be permanently classed as wet, that tirvajasti has been charged for four faslies and that the tank and channel afford trustworthy supply, the high level lands being supplied for both crops during Fasly 1282.

Mr. Wilkinson states that the channel is insignificant and out of repair, and that the supply is merely drainage.

In this case all depends as to whether Field No. 40 will be classed as wet under the rules after consultation with the Collector; but, as the minor channel supplying

these lands is taken off from a feeder to the Mungasamudram Tank, and as the supply is trustworthy, it would seem fair to class them as wet. Moreover, as tirvajasti has hitherto been charged, Mr. Whiteside should, I think, decide as to this year's procedure, as Mr. Wilkinson seems to have remitted the demand altogether. One point here deserves notice. Mr. Wilkinson's remission on the ground "that it is merely drainage" is a very dangerous doctrine. Under this ruling the rich Lalgudi Division in Trichinopoly, the flourishing villages under the Ponnery and Cawn Sahib Channels in Chellumbrum, together with countless tracts similarly irrigated would all be brought to "dry," thereby sacrificing, at a rough guess, perhaps one-fourth of the wet land revenue of the Presidency.

Survey No. 32.—Mr. Randall explains how the Monigar has diverted to his own field the water of the supplying channel to the tank; that he erects a dam therein when stream falls low and that it runs for three months.

Mr. Wilkinson says, that only a small quantity of water is diverted when there is plenty of water in the channel and that it is a jungle stream.

Here the charge is doubtless correct, the water flowing to a Government source is diverted to dry land, and according to rules universally prevailing should be charged. It is true that this case is but a trifling one, but the principle should be upheld, or others will follow the Monigar's example and matters may get as bad as they once did in the Bownagherry Taluq of South Arcot where, by means of a series of dams in the supplying channels, the dry lands above the tank were cultivated with wet crops free of charge, whilst the wet ayacut below was left waste and neglected.

14. The jungle stream question is no doubt a very important one and should be definitely settled by the Board, as different districts seem to have different views on the matter. Thus as I lately represented to the Board, the Gundla Cumma is deemed a "jungle stream" in the Kistna, but directly it enters Nellore it becomes a source of supply for which tirvajasti is charged. Again, I have been told that in Mr. Dyke's days in Nellore such a wide significance was given to the term "jungle stream" that at last only water from the Pennair was charged; and then matters had to be rectified.

The term was, I presume, intended to signify those mountain brooks and streams which come down when filled by the rains and last for only a few days at a time. Where the supply furnished by these streams is certain and continuous for four or five months they must be regarded somewhat in the light of hill springs, and under this view, lands dependant thereon would be liable to be charged, with either wet assessment or water-rate as in the case of the "sonaloo" in Kistna, the "jouk pachal" in Salem, and the "shodamboos" in Sutwaide. Moreover the old rule in the South Arcot Hukumnamah that these jungle streams should not be exempt when they eventually benefited any Government work was a safe one, and has not

only been acted on in most districts, but has been approved of by the Board. To

avoid any further trouble regarding these doubtful cases, I have generally in the settlement, with the consent of the ryots, brought the lands under this category to a moderate wet rate. This satisfies both parties and prevents the Curnam

sometimes charging and sometimes not, as inducement offers. It also enables the ryot to obtain remissions should his supply really fail.

15. One more point remains regarding the Peramboke ponds, or "Kuttays."

* *Vide* also Mr. Wilkinson's Circular, copy of which was forwarded to me by Board.

Mr. Rundall touches upon this in his letter now forwarded,* and I must say that the plan of charging nothing on the lands irrigated therefrom, or giving over these little pools altogether to the ryots seems to me objectionable. These pools are useful for the whole village and particularly for watering cattle, so that to encourage the diminution of supply by letting it go free to cultivation is to unfairly benefit one person to the detriment of the rest.

Again, it has often happened that these small tanks, even with wet ayacut under them, have been given away on the ground that they are not repaired by the Circar, but by private enterprise, and are consequently the ryots own. But then it may naturally be asked, if we thus give over these little reservoirs which can be repaired at the outlay of 6 or 7 Rupees annually, how about the river channels which the ryots maintain at a very heavy expense by clearing out, and constructing "Coramboos" from year to year, and which must remain as Government property?

In such instances we make over to one individual what has been common property for years, merely because the said individual has been sharp enough to do a little earthwork thereto. In fact, I have observed that most of the Revenue Officers who were at one time anxious thus to turn these "Kuttays" and "Tangals" into private property held subsequently a totally different opinion. I regret that this letter has extended to so great a length, but although the actual cases at issue are but trivial, the principles involved are important as they affect the revenues of the Presidency at large.

ENCLOSURE No. 1.

From C. RUNDALL, Esq., Deputy Director of Revenue Settlement, Nellore and North Arcot, to G. BANBURY, Esq., Director of Revenue Settlement, Madras, dated Nellore, 28th June 1873, No. 461-134.

I have the honour to report as desired under date the 6th ultimo, No. 895-142, on the points mooted by Mr. Wilkinson and referred to the Board of Revenue for orders by the Acting Collector of North Arcot—*Vide* Board's Proceedings of 30th April, No. 627.

2. The second of the two questions, I must remark at the outset, is not quite correctly stated. The memorandum referred to by Mr. Wilkinson at paragraph 9 of his letter, printed with the latter Proceedings, is that which you drew up and submitted to the Collector, Mr. Whiteside, on several points connected with Mr. Farmer's disposal of cases of evasion of land assessment and water-rate; and regarding which it appeared desirable that an uniform procedure should be adopted, and certain modifications effected when the Collector might review the orders passed by Mr. Farmer at the Jammabandi of the Chendragherry Taluq for 1871-72, and arranged for the numerous pending cases, reported for settlement subsequent to Mr. Farmer's completion of that Jammabandi.

3. According to Mr. Wilkinson's quotation from your memorandum, you suggested that water-rate should be charged for all lands irrigated by wells, "which though situated in dry

land are within ten yards of wet land." The ten yard limit does not affect the question, and what you did remark on this subject, I record *in extenso* below:—

Evasions of Water-rate on Government Dry Lands.

These lands when irrigated by wells within the prescribed distance of tank or channel must be charged with *tirvajasti*. But here a question arises. Mr. Farmer has only charged those wells which are situated within ten yards of a large channel, say 12 feet broad; but there are many which should not be thus exempted, as the river channels are often narrow, but very plentifully supplied. I think wherever the well is really benefited by the channel as supposed by the Board, the charge should be made. We can give the returns for such cases, and in fact for all that should be charged. Wells on dry land within ten yards of wet lands have not been charged, although, as Mr. Farmer says, the well is merely a ruse to prevent assessment being charged, as the tank or channel water would run on to the neighbouring dry land direct without any well irrigation. When the water can flow in this manner and the well is only a pretence, *tirvajasti* should be charged under Board's Orders, No. 123, paragraph 3, Column 1.

4. The prescribed distance of ten yards was not alluded to, or intended as any criterion of liability; and the second question to raise, if any doubt can be attached to the suggestion, is, not that given by Mr. Sewell, but, whether lands irrigated by wells, which, though situated in dry land, fall within the scope of Clause 1, paragraph 3 of Standing Order No. 123, should be charged with *tirvajasti*. The clause had apparently been ignored by Mr. Farmer, and the Collector's attention was drawn to the omission to make any charge in cases when a liability accrued from the situation of the well being such that it manifestly drew away water from a Government source, and benefited from its favourable position with reference to Government irrigation.

5. With regard to the first question cited by the Acting Collector of North Arcot, I have heretofore deemed the several rules promulgated at paragraph 3 of Standing Order No. 123 to apply solely to wells in unirrigated land; and that the rules laid down the cases in which wells in unirrigated land would be held to be liable to a fair and equitable water-rate on account of connection with or close proximity to a Government source of irrigation, the term unirrigated land being intended to denote land to which irrigation from a Government source might not appertain. The use of the term unirrigated land in the order is significant; and I have always regarded its application as thereby limiting the scope of the order solely to land that might be unirrigated; and have looked on all wells in land under regular wet cultivation from a Government source, as not exempted under the foregoing rules from liability to *tirvajasti* for irrigation. A well in wet land, regularly so cultivated, must draw its supply in a great measure from the Government source or surrounding irrigation; and, if the supply thus obtained by the well is diverted to adjacent dry land, a fair and equitable water-rate should certainly be levied in such cases.

6. Looking at the question in another light, it may, I think, be justly contended that the rules were originally promulgated with the view of defining and making widely known the only liability that for the future would exist in respect to wells in unirrigated land, that might either then exist or be constructed hereafter; and so give an impetus to the construction of wells in unirrigated land, by publishing the exemptions which Government had been pleased to make in the ryot's favour. Paragraphs 1 and 2 of the Order, can, I think, but mean wells intended to apply to wells in land under irrigation from a Government source of supply.

7. The rules were published apparently in 1855, when land was always registered under three heads—dry, wet, and garden; and as Rule III. which details the cases in which wells should

be exempt specifies wells in unirrigated land, it is a fair conclusion to draw that the word was specially used to denote the meaning of the order, and that it was applicable to land that might not be irrigated, irrespective of its registration as dry, wet, or garden in the Revenue Accounts. The reference in Rule VI. "to wells of all descriptions" should, I opine, be read in connection with the specification previously given in Rule III.

8. Standing Order No. 123, after being first issued, was modified by Circular Order No. VI. of 1866, as follows:—

"Under instructions from Government Collectors are informed that the distance from a river or channel bund within which a well may be sunk in dry land without subjecting it to increased assessment, is reduced from fifty to ten yards from the foot of the embankment, *no additional assessment being leviable on account of wells sunk in wet land.*" Subsequently, by Circular Order No. XV. of the same year, the instructions were further amended. "With reference to Standing Order No. VI. of 1861, Collectors are informed that the sinking of wells, whether in wet or dry lands, within 10 yards of a tank or channel is equally prohibited by the Government Orders, and that the words (no additional assessment, etc.) should be struck out."

9. From the foregoing, it appears to me conclusive, that Standing Order No. 123 as originally framed, was not intended to apply generally to wells located in both wet and dry land as contended by Mr. Wilkinson, but to wells in lands unirrigated, that is, under dry cultivation. In the Standing Order No. 123-1, it will be observed the word dry is printed in italics; and, when it was ruled, that no additional assessment would be levied on account of wells sunk in wet land, the exemption on further consideration was withdrawn. Why was there any need for this ruling and its revokement, if the rules were originally intended to apply to all wells indiscriminately, no matter whether situated in unirrigated or irrigated land?

10. It is necessary to enter this fully into the question as these Circular Orders came out just after we had commenced classification operations in Nellore, and were registering all wells as within or without the limits of liability according to the rules. In 1863, on a reference made

* No. 2,023 of 22nd April.

by Mr. Dykes, the Board ruled* that the exemption from liability to an extra charge is "withdrawn if the well is in such a position, or so

near a river or channel that it cannot fail to obtain its supply in part from it. In fact, a charge for water is to be made only when water is obtained from a Government source of irrigation." A well situated in wet land in the midst of Government irrigation cannot fail to draw its supply in part therefrom. And, though in paragraph 8 of his letter Mr. Wilkinson contends that the practice which received confirmation in the Board's Proceedings of 28th October 1872, No. 2,087, "was sanctioned on the ground that it would avoid dispute, not because the well was situated in the wet area," yet, it must, I think, be allowed that the position of the well is really the basis or cause, and likewise the essential point of the discussion in the case of each and every dispute of this nature. The Board remarked, "It is an indisputable fact that such wells are generally made because their position with regard to the tank assures them a good supply of water, and that it is almost impossible to discover, when there is a dispute, whether the water for the second crop has been drawn directly from the tank by channel or indirectly by means of the well. There may be some cases of hardship, but they must be few in number, and the interests of the State require that the rule should not be relaxed." From the foregoing it is evident there were other and more important grounds than the avoidance of disputes on which the ruling was based.

11. Had any doubt occurred to me whilst working in Nellore as to Question (1) now addressed to the Board, I should have included the same in the memorandum I drew up and submitted for orders, under date 30th May 1868, No. 142-37. The paper was disposed of by the Board, under date 20th May, 1869, No. 3,556.

12. With reference to the practice in Nellore, which I am asked to state, I have found the taluq authorities generally to regard Standing Order No. 123, as exempting all wells in dry or

unirrigated land from any liability, if without ten yards from a channel, etc., no matter what its position or connection with Government irrigation might otherwise be; and wholly ignoring any liability under Clause I. of paragraph 3 of the Standing Order. As above stated, all wells were registered during classification operations as either within or without the liability of Clause III. (as modified), and lists of all wells within ten yards of rivers, etc., thus liable were prepared and submitted to the Collector; and, at the same time, a separate list was furnished of all wells with an apparent liability under Clause I., in order that each case might be regularly inquired into and the liability, or otherwise, finally disposed of by the Revenue Department. The Collectors have held the Standing Order No. 123 not to apply to wet or irrigated land, and I find Mr. VansAgnew has remarked in a case coming under Query (1) that "A well in wet land must be presumed to draw its supply from a Government source, and if that supply is used to irrigate adjacent dry land, I don't see why that land should not pay a fair and equitable extra cess water-rate."

13. Mr. Whiteside in his treatment of cases of a like nature in the recent Jaminabandi of Chendragherry Taluq seemingly regarded a liability to accrue in like manner, as he did not question the construction we hold in respect to the rules; and, therefore, looking at the conflicting views held by different officers as to the Standing Order in question (No. 123), it must be regarded as more or less ambiguous, and to need to be more decisively worded that all doubt as to the application of the order may be removed.

14. In North Arcot, wells are very numerous and exist largely in the wet ayacut of the moderate and ordinary sources of irrigation, or tanks, which may be of comparatively slight capacity. The wells enable the ryots to take out the tank-supply to the greatest advantage, and to be assured of a second crop being matured each year for a good proportion of the wet area. The country undulates so much in parts, that often the tract under wet cultivation resembles a valley more or less; and, as a rule, the tanks or reservoirs lie well above and not far distant from the tract of wet cultivation. In the rains, when the surrounding fields are under irrigation, the wells are quite full—likewise the incline on which the pacotta bullocks work at other times. It is only after the rains may have ceased, and the tank-supply in a great measure been expended, that the wells come into play at all. If there is rain late in the season, the second crop is often matured from the tank-supply alone. In some instances, owing to the peculiarly porous character of the soil in parts of North Arcot, the sub-soil leakage is very considerable; and the wells catch and retain in a great measure a portion of the supply that would irretrievably be lost. In most of these cases, the actual distance from the tank bund that each well may be located is often quite immaterial, as the wells situated at some distance therefrom are in the course of the under-current or leakage from the supply, and benefits equally with those located nearest to the tank bund. As regards the actual benefits there may be from proximity to irrigation, wells thus circumstanced are certainly more favoured than wells within ten yards of a channel often are. There can be no doubt as to the advantage of position in the first instance, though the latter may be questionable. The percolation to wells in wet land is occasionally so great that the well fills and the surplus flows off to lands on a lower level."

15. In other instances wells are situated in registered dry land, but on the margin of the wet area, and are just as well off as if in the midst thereof. An instance of this kind was submitted for orders in my letter of 18th November last, No. 669-245. There was admitted to be a direct flow from the well for two months or so, to part of the dry holding cultivated each year with paddy under the well; and such cases clearly come within the liability of Clause I. of the Rules laid down in Standing Order, No. 123.

16. There is yet another point, in the application of the rules, on which great diversity of practice occurs, viz., with regard to the size of channels that should be regarded as occasioning a liability to wells within the prescribed distance or ten yards thereof. Mr. Farmer arbitrarily fixed on twelve feet as a limit within which channels need not be taken cognizance of in dealing

with this question; but the omission in this respect was remedied subsequently by Mr. Whiteside. The size of the channels is often no real criterion at all as to the benefits that may accrue to wells within the prescribed distance. The larger channels often run deep and carry the water-supply much below the surface level of the ground, whilst the smaller channels are flush with or above the surface level. In each case the points it is desirable and necessary to establish are, first, whether the channel previously existed and is ordinarily or occasionally used—that is a principal or minor channel of the source to which it may appertain—and, secondly, if, from its position, it manifestly benefits and draws away water from the said Government channel or irrigation therewith connected. If the channel is really of long standing and ordinarily used, and the well manifestly does benefit and has not existed longer than the channel or irrigation with which connected, the liability should be enforced in my opinion.

17. As regards districts under settlement, or at all events North Arcot, I beg to suggest that the liability as to all wells should be determined by the Settlement Officers when undertaking the changes or revision of the wet area in conformity with the general orders promulgated last year. I have requested my Assistant to invariably, if practicable, examine wells in respect to which a liability may be reported, and to record his opinion and reasons for or against the same; and, when the Board of Revenue may have authoritatively declared the right application of the several points of the above Standing Order already touched on, the foregoing course will, I consider, be the best to adopt. We shall then be able to furnish to the revenue authorities the grounds, reliably recorded, on which a liability in respect to each well may be established.

18. In modifying Standing Order, No. 123, it would be advisable to allow the converse of rule or Clause I, and to declare that the liability within ten yards need only be enforced where it is manifest that the well benefits from its proximity to the irrigation channel, etc.

19. Finally with regard to the rules referred to in Mr. Wilkinson's letter under reference,

Dry lands irrigated by means of pools or wells constructed on perambuke lands without orders should not be charged with tirvajasti, unless the pool or well is so situated as to draw away water from a Government source of irrigation.

I think the propriety of No. II. may be questioned. The rule is marginally inserted. So far as applicable to wells, it appears quite correct, as they invariably are located in occupied land; but where ponds or guntas now

registered as perambuke may be considered, such pools, ponds, guntas, or reservoirs, by whichever named, should be regarded as public property; and any irrigation taken therefrom should certainly be charged for. As a rule, these reservoirs have been constructed on public grounds, and very often supply both man and beast with water, being extensively used for watering cattle. Irrigation therefrom should generally be prohibited altogether, and not encouraged by granting it free.

20. It would be well perhaps, to obviate delay, to furnish a copy of this letter to the Collector of North Arcot, in order that any remarks that that officer, or Mr. Wilkinson might have to record thereon, might reach the Board at an early date.

ENCLOSURE No. 2.

From C. RUNDALL, Esq., Deputy Director of Revenue Settlement, Nellore and North Arcot, to G. BANBURY, Esq., Director of Revenue Settlement, Madras, dated Nellore, 11th July 1873, No. 497-145.

In continuation of my letter, No. 461-138, of 28th ultimo, I have the honour to report as requested on the subject of Mr. Wilkinson's letter of 16th May, No. 421, printed with the Board's Proceedings, No. 1,146, of 1st instant.

2. The land inspected on the occasion Mr. Wilkinson refers to was supplied from a tank situated higher up the valley, but certainly within one mile of the fields we inspected. The Mangasamudram Tank—a source of considerable capacity as tanks run in that locality—was lower down the valley, probably a quarter of a mile distant.

3. On either side of the valley there is a high level channel, and at the spot we examined this skirted the foot and commanded the area of the second terrace. The first, or lower terrace, I may remark, forms the hollow of the valley and comprises double crop wet (nunjah) land; the second that commanded by this high level channel; and the third and fourth lie above the level for direct irrigation. The tract forming the second terrace is principally registered dry, but comprises as well a slight extent of both single and double crop wet (nunjah), the whole of the

* Paragraph 4 of Mr. Wilkinson's letter.

cultivation being the same. The two wells* close to the channel passing along the foot of the second terrace are in land classed as dry, but ordinarily cultivated as wet, and requiring to be so regarded. The extent is liable to permanent transfer to wet under the rules promulgated with the Board's Proceedings of 22nd August 1872, No. 1,663. Moreover, these two wells are situated in one and the same Survey No. and the land being ordinarily under irrigation has been demarcated as if regular wet land. There are three sub-divisions; A. wholly dry assessed land; B. partly the same and partly double crop wet (nunjah); and C. wholly single crop wet (nunjah). The two wells are situated close to the channel in the dry assessed portions of A. and B., respectively. The area of No. 40-A. is ninety-two cents, and it was irrigated during Faslies 1279, 1280, and 1281, for the first crop from the well, without any charge for tirvajasti; and for the second crop from the channel, water-rate being levied. In 1282 both the first and second crops were raised from the channel supply, and at the time of our inspection the second crop had not long been harvested. 40-B. is 1.44 acres in extent, of which 70 cents are recorded to have been cultivated exactly the same as for 40-A. The remaining 74 cents lie on a higher level on the third terrace, and were irrigated by baling from the channel or from the well in the second terrace. This Mr. Wilkinson doubted, though the place of lifting was still clearly apparent. 40-C., the registered wet land, was being so cultivated. Lower down there were other numbers similarly commanded and circumstanced, only registered dry at present.

4. The channel was of small size, the breadth of the water-way being only about one foot but it never struck me that it was in great disrepair, and the facts above recorded as to the past irrigation of recent years show conclusively that it is in serviceable order. As a rule, about Chittoor, the tanks are of very small capacity, but very numerous, and the channels are very minute in size, the rapid fall allowing a fair supply being conveyed. Again, the channel in question is asserted to carry merely the drainage from the wet or nunjah fields above, and not to come from the tank. Had I been aware of this statement at the time, I should certainly have satisfied myself on this point. The drainage from the wet or nunjah fields above would naturally fall into the low level channel, forming the edge or margin of the lowest or first terrace. Probably the channel does in some measure convey the surplus supply passed through the fields higher up the valley and nearer to the tank. That it is wholly so supplied, and is not a continuation of some channel direct from the tank, I very much doubt. Unfortunately I am not in Chittoor, and at hand to solve this point before writing.

5. * Moreover, a three months tank is not so indifferent a source as might be inferred from the appellation. When full it flows for three months provided it only receives one supply and is then filled. Usually, these tanks receive a partial or full supply three or more times during the season, and are able to go on irrigating land for six to eight months. The fact that part of the ayacut is double crop wet (nunjah), and is so cultivated; and that the high land under the source was commanded and supplied for both crops during 1282, and has been invariably supplied for one crop during recent years, indicates the tank to be a fairly reliable source of supply.

6. The channel in question may be somewhat insignificant in size, but, inasmuch as it is ordinarily used, and regularly supplies the fields it commands, the mode by which it derives its supply, whether direct from the tank, or by the surplus water of fields lying above, is, in my opinion, altogether immaterial. The original source of the supply being the tank, the irrigation must be regarded as appertaining to a Government source, and a liability to a charge for water-rate is certainly established when use may be made of such irrigation. Heretofore, tirvajasti has been

charged for one crop during Faslies 1279, 1280, and 1281, and for two crops for 1282. The wells in No. 40 require to be regarded as in wet land as the tract they are situated in is ordinarily

* They are both quite close within ten yards.

under irrigation, leaving out of the question the distance they may be located from the channel.*

I insisted that they ought to be classed as wells within the prohibited limits, consequent on their being thus located and surrounded and completely filled with the channel water for several months. In the middle of the hot weather, May, we found the water supply only two or three feet from the surface.

7. Adverting to the third well, mentioned in paragraph 6, I stated that being within ten yards of the channel, a liability might under the rules be held to apply, but I certainly admitted that the well could not fairly be classed as *lopala*, or within, as the difference in the level of the land prevented any advantage accruing to the well. I did not endeavour to establish any liability in that instance, but merely explained that the demarcator had grounds for reporting an apparent liability for determination by others.

8. With reference to the hill stream, paragraph 10, the question as I take it, is not whether any diminution worthy of notice has been occasioned to the Government tank below. Is it, or is it not, a hill or jungle stream in a remote locality coming within the exemption promulgated

† Rule 4 of Standing Order No. 123.

Standing Order No. 126 quoted by Mr. Wilkinson, refers to works constructed with the approval of the Collector.

by Government.† In the case referred to, the field is situated about a quarter of a mile distant from the waterspread of the tank when full,

and the stream is one of the principal feeders of the tank. The Monigar of the village, as Mr. Wilkinson states, has constructed a narrow channel along the course of this stream, and a short distance up leads off the water by this channel and diverts a small supply to his field. As the supply in the stream diminishes, I was informed that the water was dammed back. For the protection of the interests of Government this must, I think, be looked on as an encroachment on the supply of the tank below, though the quantity of water diverted may in reality be inappreciable. If the Monigar is justified in thus tampering with vested rights, the ryots all along the course of the stream would be equally at liberty to construct small channels and help themselves to what they can get. Believing that the rule in force, No. IV. of Standing Order No. 123, did not intend to countenance any interference with streams in close proximity to Government tanks and irrigation, I insisted that for irrigation thus diverted *tirvajasti* should be charged. I did not regard the well as liable, or that it should be held to be a *lopala* well as reported by the demarcator consequent on its being five yards from the hill stream and within the area irrigated thereby. Mr. Wilkinson is in error in mentioning that we appear to hold a liability to apply to any "*water course, hill or jungle stream,*" as we do not consider any liability to apply to them in the same way as river or Government channels. Classifiers report all apparent liability in order that the same may be investigated and disposed of by higher authority.

9. Although we explained to the Revenue authorities that the liability which classifiers might thus report, required to be regarded merely as an apparent liability, needing to be established by examination and finally disposed of, the result in Chittoor has been that, owing to the multitude of instances immediate inspection and inquiry was impracticable; and, consequently, the reports as to any apparent liability have been, I am given to understand, in a great measure rejected. This partly no doubt arose from difference of opinion as to what constituted a valid liability.

ENCLOSURE No. 3.—Sawalpatti.

ENCLOSURE No. 4.—Sketch.

THESE papers relate to certain cases of alleged evasion of wet assessment for crops grown in dry land which were brought to notice in the District of North Arcot.

2. It is difficult to frame rules which shall be applicable to every such case, but District Officers should be able without hesitation to settle each case, on the broad principle which has been laid down in Standing Order No. 123. This is that where the supply of the well is drawn from a Government source, a charge should be made.

3. Hence a charge is correctly made for all irrigation from a well sunk in wet land. Such wells often derive their supply by surface flow, and it may be asserted of every one of them that they derive water from the source at least by percolation. Wells sunk in dry land, but closely adjoining wet land, and in such a situation as clearly to derive their water from the existence of the tank, would, under this principle, be properly charged; but cases of this kind should be dealt with liberally, and charges should be imposed only when it is clear that the well depends on the tank or when any fraudulent intent is apparent. The character of the well, and whether the land could or not be irrigated by direct flow, will be points of importance to guide the District Officers to whose discretion the decision must be left. There seems no necessity to modify or add to the Standing Orders on the subject. Clause I. of Standing Order No. 123, as pointed out by Mr. Banbury, meets such cases exactly. These remarks dispose of the questions raised in the letter recorded in the first Proceedings read above.

4. There appears to be considerable divergence between the reports of Messrs. Wilkinson and Rundall as to the facts of the cases in which *tirvajasti* has been charged for dry land containing wells, and which are the subject of the second Proceedings read above. It appears that as regards two of the wells the land is capable of irrigation, and is in fact irrigated from the channel, the water of which fills the wells for several months—and that as to the third well its proximity to the channel was merely brought to notice, but it was not insisted that the charge should be imposed, the land lying on a higher level. The Board consider that these cases should be left to the decision of the Collector. It is inadvisable to attempt to define the word "channel" as regards size, for its importance and its relation to the well and the land irrigated frequently depend on other circumstances.

5. In the further case brought to notice when the Monigar diverted to his dry field, in which he had also sunk a well, the water of a channel or stream flowing directly into a Government tank, the charge should clearly be made. The proviso in the first of the rules contained in Standing Order No. 126 is sufficiently distinct and covers the case in question.

(True Copies and Extract.)

(Signed)

H. E. STOKES,

Acting Sub-Secretary.

To the Collector of North Arcot.

„ Director of Revenue Settlement,

with two original enclosures returned.

Exd. W. H. French.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 13th March 1876.

From W. D. HORSLEY, Esq., Collector of Cuddapah, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated 24th February 1876, No. 47 :—

I HAVE the honor to report on the subject of G.O., No. 32, dated 10th January 1876, as directed in the footnote of the Board, dated 17th January 1876.

2. The irrigation works in this district are chiefly tanks fed by small streams, which collect the drainage of the country. The rain-fall is by no means excessive, and is very partial. The south-west monsoon rains are not heavy, but ordinarily the tanks receive sufficient water to enable ryots to commence ploughing and sowing their wet lands. The rains of the north-east monsoon in October and November fill the tanks, and the water brings the crops to maturity.

3. The tanks are said to be capable of holding water sufficient to irrigate the lands under them for a certain length of time, and thus a tank is termed a one, two, or three months' tank. The supposition is that the calingulah of a tank does not flow till the tank has received a supply sufficient to bring all the wet crops in its ayakat to maturity. When a tank is said to have filled, wet land left waste receives no remission, as the supply of water is supposed to have been sufficient.

4. The tanks were no doubt originally of the capacity shown in the accounts. A four months' tank at one time did hold water sufficient for the cultivation of its ayakat for four months, but I may almost say that no tank holds now the water with which it is credited. Tanks naturally silt up, and this process is very often accelerated by tank bed cultivation, which it is so difficult to check, though efforts are always made at every Jamabandi to render the practice as expensive as possible to the offending ryot. The result of this silting process is that tanks unless they fill two or three times in the year, the water they receive is insufficient for the cultivation of their ayakats. The ayakats have thus become too large for the tanks.

5. If, owing to a good year of rain, a tank receives more water than the ayakat requires, wet crops may be raised by means of the surplus tank water on dry land beyond the wet ayakat on payment of a water-rate. This privilege is supposed to be exercised only after the wet lands have received all the water they require. This is very good in theory, but in practice Reddies, Cur-nams, and influential ryots have for years watered their dry lands to the detriment of the wet lands. Even when these outsiders fail to get water, they will not allow the water-rate entered in their puttass for water taken in past years to be struck out, as they hope in course of time to establish their right to tank water. Two remarkable instances of this came to my notice when settling the Sidhout Taluq this year. I granted wet remission owing to tanks having received no water. A list of charges for water irrigating dry land was then placed before me, and I perceived that dry land had been irrigated by a tank, the revenue under which I had remitted, because the tank had received no water. My inquiry showed that the tank had undoubtedly received no water, but the dry land ryots had asked the Cur-nams to allow the water-rate charged in past years to be continued, that their right to water might appear in the accounts to be uninterrupted for a number of years. I will refer to this again and show how the settlement have encouraged this idea. This practice of watering dry land continued for many years till, in 1861, the A register was introduced. This register showed what dry lands had received water for a certain number of years, and these lands were added to the ayakats of tanks. The Cur-nams, I believe, were well paid by the dry land puttadars for the entries made in this register. Thus ayakats already too large for tanks were made still larger.

6. Lands composing wet ayakats pay a heavy assessment, as tanks kept up by Government are supposed to give them all the water they require, and some of the lands are assessed at a double crop rate as they are supposed to raise two wet crops. Tanks are incapable of supplying all the required water, and the ryots to keep their crops going sink wells in their wet fields at their own cost. The cost of sinking a well may be estimated at Rupees 500, and, in addition to this expenditure, the ryot has to keep men and bullocks to work the well. But for the assistance of these wells, many acres of crops would be annually lost to the ryot, and because the crop withered owing

1873.

Board of Revenue,
MADRAS.

PROCEEDINGS, 23RD OCTOBER 1873, No. 2,169.

Encl.

Received

OCTOBER.

No. 2,169.

Wet-Assessment—for crops grown in dry land in North Arcot District.—Orders passed on papers relating to certain cases of alleged evasion of —

Rev 25/1765/76

Gr 26.6.77 No. 2110.

to want of water, the assessment would be partially or wholly remitted. The wells protect the ryot and the Government from loss. The ryots do not gain much by their wells. They save their crops, but from the value of their crop must be deducted the money spent in digging and working the well. In order that they may receive something in return for their outlay, the ryots irrigate by means of their wells wet crops on dry land. Because the wells are in wet lands, and thereby, to use the words of the Board, "derive their supply in part at least from Government sources" the ryots have to pay a water-rate as if the water had been taken from a tank. In a year like the present, the supply of water afforded by wells has been very valuable. To what extent wells can be utilized will be seen from the enclosed statement compiled from facts which came to my notice when settling the Sidhout Taluq. The Board will observe how little tanks had to say to the revenue from lands under the tanks, and but for wells whole ayakats would have been utterly unproductive. The very first case in the list shows that a four months' tank with a wet ayakat yielding a revenue of Rupees 540, received this year no water. Notwithstanding, nearly the whole ayakat was rendered productive. By means of wells, dry crops have been raised. The wet assessment is lost to Government, but a part of it is recovered by the collection of an assessment at the highest dry rate. The third tank in Jonnavaram received one-third of its full supply. Nearly the whole of its ayakat was cultivated with wet crops by the assistance of wells, and a few acres were by the same means cultivated with dry crops. But here again wells which have done so much are taxed. They are in wet land under a tank with very little or no water, and I scarcely think that the Board could say "in part at least" they derive their supply from a Government source. Yet under the new rules, these well owners paid a water-rate for every acre which raised a dry or a wet crop.

7. I have shown that wells have been dug and worked at a great outlay on the part of their owners, and that the necessity for the wells has arisen owing to tanks being unable to give the water they are supposed to give. I have shown that the Government gain a great deal and the ryot very little by this arrangement. I have shown that the ryot when he tries to make something out of his well, he is at once stopped by a tax. I think, therefore, I am justified in saying that wells are treated illeberally. Admitting that "in part at least" the well springs are assisted by the tank, I think Government might, without being extravagant, refuse to take notice of this, and thereby help the ryot who has done so much to help himself. The present limit of distance from the tank bund should be maintained, but all wells beyond that should be allowed to irrigate wet or dry or second crops on wet or dry land without payment of water-rate or second crop assessment.

8. I have already alluded to the anxiety displayed by ryots to have their dry lands classed as wet. The first mischievous result of this was the A Register, which made ayakats larger still. The mischief however is not at an end, as the Settlement Department is making the ayakats larger. That department examines the old accounts, and imagines that accounts show facts. The accounts will show that dry land in excess of the ayakat has paid water-rate, but that does not prove that the lands were legitimately watered, or that they were even watered at all. Because the dry lands have paid for water, the department assumes that the tank was capable of watering the lands. The A register was made on fees to Curnams, and not on facts, yet I know the Settlement Department looks upon that account as a valuable document, and bases its revision of ayakats on the entries in that account. This, of course, is known, and consequently as I found to be actually the case in the Sidhout Taluq, where the revision of ayakats has not yet been commenced, the ryots consent to be charged for water which they have not received, in order to induce the Settlement Department to class their land as wet, and to include them in a wet ayakat. The "much personal inquiry and inspection" alluded to by Mr. Puckle in his letter to the Board, dated 13th February 1875, has no doubt been made by the officers in the Settlement Department, but the inquiry does not show facts. Ayakats may not be, as I and every officer who knows anything about the district says, too large. They may be large enough, but how it is possible that they can be too small, as the Settlement Department says they are, I do not understand, unless it can be shown that anything has been done to the tanks to make their capacity greater. Unfortunately the complaint in this district is that tanks have been neglected, and, therefore, it might be supposed that their ayakats were large enough, or too large, but certainly not too small.

9. I have alluded to the revision of ayakats, because if the ayakats are increased, the number of wells will increase also. I trust, however, that the Board will consider it necessary to stop the revision of ayakats as at present conducted.

ENCLOSURE No. 1.—Statement.

The Collector was requested to submit his report through the Director of Revenue Settlement. A copy of the communication will now be furnished to that officer with the request that he will state his views on the question.

(A true Copy and Extract.)

(Signed) C. A. GALTON,
Acting Secretary.

To the Director of Revenue Settlement,
with original Statement, to be returned.

Copy to the Collector of Cuddapah.

Exd. W. J. Lewis.

No. 2,246.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 1st September 1876.

Read again Board's Proceedings, dated 13th March 1876, No. 723.

Read also the following letter from C. RUNIBALL, Esq., Acting Director of Revenue Settlement, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated Madras, 13th June 1876, No. 2,379-58:—

I HAVE the honor, with reference to Board's Proceedings (enclosure returned), No. 263, of 11th December 1875, and No. 47, of No. 723, of 13th March last, to offer the following remarks on the questions raised by the Collector of Cuddapah in his letters to the Board as per margin.

2. In the first communication Mr. Horsley alludes to the ruling of the Board, under date the 22nd August 1874, Proceedings, No. 2,355, that water-rate should be levied in the Cuddapah District for a second wet crop raised on dry land, which proposition he opposed on the grounds given in his letter printed with the foregoing Proceedings. In his second letter the Collector advocates the extension of the exemption he thus formerly recommended, and proposes that so far as well irrigation may be concerned, that "the present limit of distance from the tank band should be maintained, but all wells beyond that should be allowed to irrigate wet or dry or second crop on wet or dry land without payment of water-rate or second-crop assessment." Mr. Horsley takes exception also to the manner in which the revision of tank ayacuts is being carried out by the Settlement Department in his district, and wishes the operation, as at present conducted, to be stopped.

3. Of the two questions thus raised, it is desirable that I should refer first to the revision of tank ayacuts which is being conducted in conformity with the rules G. O., No. 181, of 27th January 1871. It is contended that the tank ayacuts are already too large for the tanks, and that the tendency of the action of the Settlement Department is to augment the area or ayacut still further. At the same time seemingly the Collector regards it as a general complaint that the tanks are in a neglected state, and that, owing to the gradual silting process, the capacity has been curtailed; whilst the ayacut has been added to since 1861 by lands shown in the A Register as having received water for a certain number of years, being registered as wet. The result of this silting process is stated to be that, unless the tanks fill two or three times a year, the supply received is insufficient for the cultivation of their ayacuts.

4. Save the additions to the tank ayacuts in comparatively recent years, the condition of the tanks in Cuddapah is much the same I expect as in the neighbouring districts. The expenditure on the repair of tanks is necessarily limited; and as regards the numerous smaller or least important sources, the complaints as to the neglected state they are in may have some foundation; but compared with former days and other districts, the more important and larger tanks are probably as efficient now or not so than formerly.

1876.

Board of Revenue,

MADRAS.

PROCEEDINGS, 13TH MARCH 1876, No. 723.

Received

MARCH.

No. 723.

Wells—situated in wet lands in Cuddapah District.—Forwarding to Director of Revenue Settlement for remarks, copy of Collector's letter regarding cultivation raised by means of—

*Recd 26
26.6.77 W. M. C.*

5. From what I have observed elsewhere, it is an old established custom for the smaller tanks to require to fill two or three times a year to be able to supply their ayacut. The capacity of the tanks is such that it may reasonably be regarded as a necessity from the first. As a rule, the rain is not limited to one fall, but is distributed over a period of six months. A tank received a partial supply, which is added to by a second fall of rain, and with the first heavy fall the tank probably fills; and, as the supply is expended, it is re-placed by further falling rain at intervals, if the season is propitious. That the seasons vary considerably is well known, and it is, no doubt, difficult to determine to what extent the ayacut of a tank may be revised. The

Board's Proceedings No. 746, of 10th May 1872, paragraph 8, clause 1: "The principle always kept in view must be that the area which Government can ordinarily supply with water should be registered as 'wet,' and all the rest as 'dry.' This is a question of fact, and on re-consideration the Board are of opinion that the 'consent' of the landholders is immaterial. If land can be supplied with water it is 'wet land'; if not, it is 'dry land.'"

object aimed at by the rules is to revise the area to conform with the ordinary capabilities of the tank in respect to irrigation in fair seasons. Dry lands ordinarily irrigated along with the adjacent wet area are thus transferred to wet. The capabilities of a tank must necessarily, for the purpose of the rules, be gauged in some way. Mr. Horsley is not disposed to accept for his district the course prescribed by the rules and followed elsewhere; and seemingly he wishes the ayacuts left as at present, and not added to, on the ground that the ayacuts are large enough already, and will not supply an increased area.

6. The circumstances of all ayacuts are not the same. Under some tanks the area may be excessive; under others it may be considerably less than the ordinary capability of the supply may suffice for. Again, in other instances, part of the ayacut may be out of cultivation, and dry land on a lower level, or of better quality, may be now irrigated instead. Whatever is done, it is certain that no hard and fast rule can apply. The case of each ayacut must necessarily be examined and dealt with on its merits, and to do this some principle must be followed, and I contend that the course adopted by the department—that of the ordinary capability of the tank in the past—is the safest and the most readily ascertained method. It may reasonably be argued, that land irrigated under a source in the past in fair seasons may be regarded as so irrigable in the future.

7. Mr. Horsley maintains that the irrigation of the past, as shown by the accounts or A Register, is mostly fictitious, and that the proposals of the department made on the strength of the A Register, are unreliable, and so far as personal inquiries are concerned are not founded on fact. There are some cases evidently, from what is stated, that show the entries by the accounts to be misleading. Still, it cannot be reasonably believed that, as a rule, all entries are fictitious, or that any large portion of the water-rate levied in the district is gratuitously paid by the ryots when water may not have been supplied or obtained, and they know no liability to exist for such payment. If the department proposed the changes to the ayacuts solely on the basis of the A Register, they would, no doubt, be apt to be misled. The transfers are, however, based as well upon actual inspection of the ground; and thus if care be exercised any chance of being misled is obviated. Should the inspection show the dry assessed area to be more or less surrounded by ordinary wet lands, and to be

partitioned and embanked for irrigation and cultivated as wet only, in such years as the supply may suffice, the conclusion that the supply in ordinary years will irrigate such land is well supported. Much depends upon the position of the lands to be changed with reference to the regular wet area; and, if enclosed by wet, the land is probably unsuited for cultivation save under irrigation, the moisture from the surrounding or adjacent wet fields being detrimental to the growth of any dry crop.

8. There are thus many circumstances needing consideration when dealing with the question of revision of tank ayacuts. The tendency of the changes effected, so far as tabulated, is explained in the accompanying letter from Mr. Cox which affords information, as well as to Mr. Horsley's action in respect to the proposals submitted for his consideration by the Deputy Director.

9. The following abstract represents the effect of the changes as given in the statements submitted by Mr. Cox:—

Items.	Wet Ayacut as registered in the Revenue Accounts.		Deduct transferred from Wet to Dry.		Balance.		Add transferred from Dry to Wet.		Revised Wet Ayacuts.	
	ACRES.	CENTS.	ACRES.	CENTS.	ACRES.	CENTS.	ACRES.	CENTS.	ACRES.	CENTS.
<i>Koilkuntla Taluq, Kuranol.</i>										
Deputy Director's Proposals.	5,394	85	531	41	4,863	44	869	24	5,732	68
As amended by Collector ...	5,394	85	820	53	4,574	32	843	10	5,417	42
Difference ...	...	...	— 0	88	+ 0	88	— 18	14	— 17	26
<i>Proddattur Taluq, Cuddapah.</i>										
Deputy Director's Proposals.	1,165	80	113	75	1,052	5	114	22	1,166	27
As amended by Collector ...	1,165	80	215	35	950	45	51	56	1,001	1
Difference ...	...	...	+ 102	60	— 102	58	— 62	66	— 165	24
<i>Jamalamadagu Taluq, Cuddapah.</i>										
Deputy Director's Proposals.	190	99	13	24	177	75	78	24	255	99
As amended by Collector ...	190	99	128	50	62	49	...	...	62	49
Difference ...	...	...	+ 116	26	— 116	26	— 78	24	— 194	50

The three taluqs comprised one settlement report, and Koilkuntla, as is well known, formerly belonged to the Cuddapah District. There is very slight variation between the proposals and the Collector's amendments for the latter taluq. If the tank bed area, 432 acres, newly adjusted under wet, be excluded from the comparison, the net result is a decrease of 410 acres as pointed out by Mr. Cox, and not an increase.

10. For the villages tabulated under the Proddattur and Jamalamadagu Taluqs, the Deputy Director's proposals would leave the ayacuts of the former within an acre or two of the original area, whilst the Collector's alterations would reduce the same by 165 acres. In the latter taluq the changes effected are most extensive. The former ayacut of 190.99 acres was proposed by Mr. Cox to be enhanced to 256.99 acres. Mr. Horsley, however, objected to much of the area being retained as wet at all, and cut it down to 62.49 acres. The reductions seemingly appertain to lands under wells. Such want of accord is inevitable, if the Collector treats the proposals submitted to him upon considerations other than the rules sanctioned by Government for the purpose, and upon which the proposals may have been framed.

11. At paragraphs 18 and 19 of Board's Proceedings, No. 915, of 16th June 1872, the course advocated by Mr. Banbury of treating as wet, lands under Dasabandam, Do-

ruvu, and Itifak wells was approved and confirmed by paragraph 4 of G. O., No. 145, of 5th February 1873. In conformity with this ruling, lands irrigated from sources of the foregoing nature, deriving their water-supply from a recognized Government source of irrigation, have been brought to wet under the rules by Mr. Cox. If irrigated for a crop other than paddy, Mr. Horsley has generally declined to retain such lands under wet, or to transfer them to that head when previously dry, but has

Villagewar statements and plans accompany the Deputy Director's letter.

it will be seen that, in the case of 71.65

(I.) Under all the works the lands are poor, and to raise wet crops does not pay. The lands should all be classed dry.

(II.) Wet crops cannot be cultivated. The land should be dry.

made exceptions in some instances. In this way in Maddanur and Dammara Nandyala of the Jamalnadagu Taluq, 71.65 acres irrigated by Dasabandam wells in the first village, and 11.29 acres irrigated by Doruvu wells in the second village, the Collector transferred the whole of the irrigated area to dry for the reasons marginally given.

12. The decision of the question rests upon the fact whether there is any liability for a charge for irrigation, not upon the crop grown. The cultivation of garden crops may be more suited to the soil than the growth of paddy, but provided the irrigation is regular and sure, the area irrigated should be treated as wet. All lands thus treated are non-labile, it must be remembered, for any second crop charge, which is an advantage, as a considerable extent is seemingly so cultivated.

13. The effect of the Collector's views is exemplified in the case of tanks by the plans and statement submitted by Mr. Cox for the village of Madur, Proddatur Taluq. The results of the Collector's modifications are exhibited below:—

	Deputy Director's Proposals.		Collector's Amendments.		Difference.	
	A.	C.	A.	C.	A.	C.
Register, wet ayacut	489	37	489	37	...	...
Deduct transfer, wet to dry	30	13	30	13	...	...
Balance	459	24	459	24	...	...
Add transfer, dry to wet	55	61	...	...	-55	61
Revised ayacut	514	85	459	24	-55	61

14. The net increase proposed to the ayacut is thus 25.48 acres. The Collector endorses the adjustment of 30.13 acres to dry, and, if the plan is referred to, it will be seen that these lands are on the outer edge of the ayacut, or else regularly detached and in the midst of dry. The lands not being irrigated, are properly excluded altogether from the ayacut under Rule 16-2. As regards the 55.61 acres, the Deputy Director proposes to adjust from dry to wet, the Collector seemingly deals with the question on general considerations, and rules that the "ayacut should not be increased." It is evident that the changes were not examined with reference to the rules, and so disposed of, as they should have been. Nor does the map appear to have

been consulted. By referring thereto, it will be seen that the fields proposed for transfer to wet are so surrounded by irrigated lands as to render their continuance as dry undesirable, provided they are ordinarily irrigated as appears to be the case. The crop is noted as paddy in all instances when cultivated. A few fields are now and again waste, as will generally be the case in wet lands. Had the Collector shown the lands not to be ordinarily irrigated, and therefore not liable to transfer under the rules, the modifications made would, of course, have been acquiesced in.

15. The bulk of the land being ordinarily irrigated for paddy, and solely under irrigated crops when cultivated, the lands were seemingly correctly proposed for transfer to wet, and, in my opinion, the proposal should be maintained. It will be noticed that there are several dry fields so left, still interspersed amongst the ayacut, and it cannot be fairly regarded in this case that the ayacut has been unnecessarily enhanced by this department, and that past experience warrants no change being made. The source has sufficed hitherto in fair years for 459.24 acres of the original ayacut, and the bulk of the 55.61 acres has been irrigated also. The source is capable of irrigating the 514.85 acres now credited to it, and that area should therefore be confirmed, subject to any slight modification that may be needful.

16. At paragraph 5 of his letter, No. 47, Mr. Horsley alludes to dry lands on which wet crops are raised by means of the surplus irrigation as being beyond the wet ayacut. I would remark that the ayacuts are not compact, and very often the dry lands receiving the surplus irrigation are not entirely beyond, but a good deal intermixed amongst the regular wet lands; and thus it is so essential they should be duly considered and adjusted if in reality under wet cultivation.

17. I will, if the Board approve, enjoin greater care upon the Deputy Director to restrict the revision of tank ayacuts in Cuddapah to the area that may be irrigated in ordinary years, and to eliminate all doubtful cases where the land may not, when cultivated, invariably be under irrigation. If this is done, and discretion is exercised in applying the rules, I do not apprehend that the ayacuts will be unnecessarily extended or beyond the capabilities of the sources. At the same time, I would request that the Collector, in dealing with the revision of tank ayacuts, may be directed to conform to the rules and dispose of the contemplated revision on that basis. As regards the changes taken exception to by Mr. Horsley, I would suggest for the settled taluqs—Proddatur, Jamalnadagu, and Cuddapah—that the Deputy Director's proposals be allowed to stand, and modified, if need be, on appeal. It is very desirable that these three taluqs should be closed. The non-settlement of the question prevents the settlement registers of several villages being furnished for printing. It will, I think, be evident to the Board that the proposals have been carefully scrutinized and framed by the Deputy Director.

18. That surplus water is generally available, and that the tanks in the taluqs of Cuddapah recently settled, and now under settlement, are capable of generally irrigating dry land to some extent, may, I consider, be satisfactorily demonstrated by the

water-rate and additional assessment levied on this account during recent years. The subjoined statement furnishes particulars for the past five years:—

Talugs.	ADDITIONAL ASSESSMENT AND WATER-TAX ON GOVERNMENT LAND.				
	Fasli 1280.	Fasli 1281.	Fasli 1282.	Fasli 1283.	Fasli 1284.
	RS.	RS.	RS.	RS.	RS.
1. Cuddapah	12,599	9,136	11,455	12,617	2,775
2. Proddatur	2,934	2,959	3,486	3,371	983
3. Jamalannadugu... ..	5,582	4,592	4,863	5,239	2,013
4. Budwail	7,329	6,995	7,336	6,793	4,394
5. Sidhout	4,643	4,640	5,149	4,892	2,610
6. Pullampett	5,489	6,282	7,193	6,945	6,089
Total ...	38,576	34,604	39,482	39,857	18,814

19. In Fasli 1283 the charge amounted to Rupees 39,857, much the same as during the preceding three years; but in 1284, in consequence of the floods, I conclude the sum fell to Rupees 18,813. It is sufficient to show that in most years a good extent of dry land is ordinarily irrigated; and the sum is too large to suppose that any considerable portion of it can be paid voluntarily for no consideration of irrigation received, as implied by the Collector.

20. I have still to refer to the second question: the Collector's proposal that wells in wet lands, not within the prescribed limit of distance of the tank bund, ten yards, should be free to irrigate dry or wet, or second crop on dry or wet without any liability for water-rate or second-crop assessment.

21. The occasion for considering this question arose with the remark made by Mr. Horsley at paragraph 6 of his letter to Board, No. 263, of 11th December last, when reporting on the state of the season in his district that "if Government would treat wells more liberally, the effects of a dry season would not be so severely felt by the ryots. I have written before on this subject, but I regret to say that my views did not meet with the approval of the Board." Mr. Horsley was supposed to refer to

G.O., No. 32, of 10th January 1876. Board's Proceedings, No. 2,355, of 22nd August 1874; and upon being requested to record his views in greater detail, he complied thereto by letter, No. 47, of 24th February last. The former correspondence that has passed is not, however, referred to, nor is the present treatment of lands generally irrigated by wells for a second crop on wet land specified, though the Collector expresses himself so strongly as to the illiberality of the orders now in force in respect to such irrigation. It is not to be inferred from Mr. Horsley's letter that any concession has previously been granted by Government in cases of the nature to which he refers. The question was, nevertheless, raised at a comparatively recent date by Mr. Storr, who suggested that one-third in place of one-half of the ordinary wet assessment should be charged. Mr. Horsley, in forwarding on the proposal, did not regard the reduction as sufficient, and recommended

* Board's Procs., No. 85, of 11th January 1872. that the charge should be limited to one-fourth. The Board* supported the latter

proposition, and it was approved by G.O., No. 928, of 12th June 1872, as a temporary measure, pending the introduction of the revised settlement. Thus the reduction of the former charge by one-half has had effect during the past four years, and lands irrigated for a second crop partly by wells are at present treated differently from lands directly supplied by a tank or channel for a second crop. Subsequently Mr. Storr, in remarking on the rules for the revision of tank ayacuts*, questioned the fairness

* Board's Procs., No. 1,663, of 22nd Aug. 1872. of any charge at all for such irrigation; and, in disposing of the reference (Proceedings, No. 2,087, of 28th October 1872,) the Board remarked at paragraph 6:—"The question whether the rule that 'second crop' is to be charged for when it is grown with water obtained from private wells in wet land is an important one involving a very large amount of revenue in most of the districts. It is an indisputable fact that such wells are generally made, because their position with regard to the tank assures them a good supply of water, and that it is almost impossible to discover, when there is a dispute, whether the water for the second crop has been drawn directly from the tank by channels or indirectly by means of the well. There may be some cases of hardship, but they must be few in number, and the interests of the State require that the rule should not be relaxed."

22. The Collector's proposition, at paragraph 7 of his letter, No. 47, of 24th February, has thus been previously before the Board and negatived after due consideration, both in respect to irrigation from wells in wet land for a second crop in wet land, and to either first or second crop in dry land; and I fail to see either on the facts the Collector now records as to the action of wells during the past season, or in the other reasons he adduces, that would justify wells being freed entirely from any charge for irrigation for a second crop. The difficulties referred to by the Board would always be present; and, whilst it is essential that the fact of such irrigation being mainly dependent upon wells in many cases should be recognized and allowed for in adjusting the second crop charge in such cases, there is no real necessity to forego the charge altogether as recommended, for it is based on good grounds and would lead to endless complications if attempted.

23. The Collector represents that the Government gain a good deal and the ryots very little by the existence of these wells. That the wells do, as stated, play an important part in the irrigation of his district, and secure much of the Government revenue in indifferent seasons, must necessarily be admitted, as also that much of the second crop assessment raised under many of the ordinary tanks is mainly due to irrigation afforded by these wells. With due deference to the Collector's opinion, I must however submit that there are substantial advantages on both sides. The circumstances of wells sunk in the wet lands differ materially from wells in dry land. The size and depth being much less, they are nothing like so costly to construct, or so expensive to maintain and work, and as the water springs freely, and the lift is comparatively slight, they are capable of irrigating a very much larger area than wells not similarly located in wet land. As a rule, even a slight store of water in the tank above keeps the level of the supply in the wells within a few feet of the surface and thus renders the lift easy and effective. For a further description of wells in wet lands, paragraphs 14 and 15 of my letter, No. 464-134, of 28th June 1873, printed

with Board's Proceedings, No. 2,169, of 23rd October 1873, can be referred to. Though the remarks then recorded applied to North Arcot, they are in a great measure applicable, I believe, to Cuddapah also. I contend, therefore, that wells in wet lands possess very decided advantages over wells in dry lands, and that these advantages accrue entirely from the wells being sunk in Government irrigation, whereby a much more ample supply and one much more easily worked is secured.

24. The question is one of great importance, for Cuddapah is not singular in respect to this well irrigation. It exists to a large extent in North Arcot and most other districts, and the revenue involved would amount to a large sum. In Cuddapah during the past five years the assessment realized for second crop irrigation varied according to the season from a little over half a lakh to nearly one lakh of rupees, as exhibited in the subjoined statement, notwithstanding the concession made by G.O., No. 928, of 12th June 1872, which limited the charge for irrigation mainly from wells to one-fourth of the single crop assessment. It must moreover be remembered that this is irrespective of any consolidated second crop charge:—

Taluqs.	Fasli 1280.	Fasli 1231.	Fasli 1282.	Fasli 1283.	Fasli 1284.
<i>Principal Division.</i>	RS.	RS.	RS.	RS.	RS.
Cuddapah	8,592	3,180	5,400	9,599	11,421
Proddatur	621	2,268	3,815	3,016	1,627
Jamunamylagu	5,958	3,170	5,497	5,010	5,445
Badwail	6,723	5,012	11,960	4,806	3,415
Sidhout	8,980	6,768	8,067	7,998	5,130
Pullampett	13,502	12,943	18,094	15,687	18,819
Total...	44,376	33,311	52,833	45,056	45,857
<i>Sub-Division.</i>	RS.	RS.	RS.	RS.	RS.
Pulivendla	3,280	2,880	3,304	3,329	2,935
Royachoty	6,235	3,390	4,594	3,071	8,352
Kaderi	1,720	2,544	2,969	2,518	2,822
Voilpaul	10,021	8,629	10,184	6,543	12,664
Madanapally	8,890	5,989	13,228	7,324	20,489
Total...	30,146	23,432	34,279	22,785	47,262
Grand Total...	74,522	56,743	87,112	67,841	93,119

25. It is, of course, impossible to indicate or conjecture what proportion of this second crop assessment may appertain to sources mainly depending on wells for second crop irrigation, and which Mr. Horsely would wish to see relieved of any charge for second crop; but probably the greater number of tanks in the district—as small tanks are very numerous—would be affected by the proposal, and thus a considerable proportion of the charge now realized would be affected.

26. Putting aside the revenue involved, many difficulties would beset any attempt to free in this manner the tanks mainly depending upon wells for the irrigation under consideration, as pointed out by the Board in Proceedings, No. 2,087, of 28th October 1872, already quoted from. The capabilities of a tank to supply second crop irrigation

depends generally upon its capacity as a reservoir; but in some seasons with an early and considerable fall and a fair distribution of rain during the remainder of the monsoon, even the smaller tanks are able to afford direct irrigation for two crops, if not for the whole at all events for some portion of the area. Moreover, wells are now and again used to start and irrigate for a time the first crop should the burst of the monsoon be deferred, and paddy follows subsequently as the main crop. Thus the aid which the wells afford is not confined to the second crop only but in part may apply to both. Again, the degree to which tanks depend upon the wells for second crop irrigation varies considerably; and, if the sources mainly depending upon wells for second crop cultivation were to be freed, it would be considered a hardship to exact the liability of wells in the case of wells under tanks capable in most years of supplying irrigation direct to some extent.

27. Much has already been done to alleviate the former assessment on well lands. Under the rules which originated with the orders of the late Court of Directors in 1852, the exceptional assessment upon old well lands in Cuddapah as elsewhere was adjusted to dry rates under the sanction of Government accorded by G.O. No. 1,836, of 29th June 1869, provided the lands were unconnected with Government irrigation. The reduction of assessment which the measure entailed in respect to land in occupation in Cuddapah amounted to no less than Rupees 1,24,291—*Vide* G.O., No. 279, of 14th February 1871.

28. As regards irrigation from wells in wet land extended to dry, the charge according to the rules in force for the bulk of such irrigation falling under the second class rates is, after deducting one-fourth for lift, Rupees 2-4-0 per acre for a paddy crop and Rupees 1-2-0 for dry crop or second crop. Considering the great value possessed by irrigation in Cuddapah, this charge is very moderate, and should, I think, be maintained. At present the single water-rate of Rupees 2-4-0 under the second or Rupees 3 under the first class covers any charge for second crop also, but this limitation of the rules applies only until the revised assessment may be introduced. Hence the system differs somewhat at present in the settled and unsettled taluqs.

29. Under the new settlement, precarious second crop irrigation of the nature adverted to will, in conformity with the ruling of Government contained in G.O., No. 880, of 14th July 1874, be offered to the cultivators to compound for at their option on favorable terms. Owing to the comparatively little irrigation in the taluqs already settled, little has been done in this respect. The rates proposed by Mr. Banbury were one-third or one-fourth of the first crop charges but in the sub-division one-fifth, as in Salem, will have to be taken also, and if requisite this rate should be applied to the main division of the district as well. Seemingly there is but slight disposition to compound in the settled portion of the district; but, if the rates are thus modified and fixed at one-third, one-fourth, and one-fifth, an opportunity would be afforded the ryots if they are inclined to compound at all. The one-third rate might be generally regarded as applicable to tanks from which the direct irrigation may be precarious for a second crop, the one-fourth rate

to tanks only partially able to irrigate a second crop as a rule and depending in part on wells, the one-fifth to tanks under which irrigation for a second crop might be mainly by wells. In some instances, it would doubtless be requisite to treat the second crop irrigation of one and the same source where it might vary considerably by block under ten or more of the rates fixed. This course has been already advocated at paragraph 9 of my letter to Board, No. 2,057-46, dated 15th May 1876.

30. The course to be pursued subsequent to settlement has not seemingly been definitely discussed and settled with reference to the views expressed by Government in G.O., No. 928, of 12th June 1872. The principle of a reduced charge for second crop irrigation mainly from wells having been conceded, it is necessary and reasonable that it should be maintained. I would therefore propose that, if not compounded for in the manner indicated above, the charge be confirmed as formerly at one-half of the first crop assessment for tanks from which direct irrigation may be precarious, and fixed at one-third and one-fourth respectively for tanks only partially able to irrigate a second crop and, as a rule, depending in part on well irrigation, and tanks under which irrigation for a second crop may be mainly by wells.

31. Thus in place of a compounded charge of one-third, one-fourth, and one-fifth, the annual charge, when irrigation may be availed of, would be respectively one-half, one-third, and one fourth, or one rate higher. This, I must admit, would limit the variation in the charge to a small amount and offer less inducement to the ryot to compound; but if the reduction of the charge, in cases where the second crop irrigation may be mainly supplied by wells, to one-fourth is conceded, as it must be under the new Settlement, greater variation could only be secured by fixing the lowest compounding rate below one-fifth, which I regard as undesirable.

32. The addition for second crop, if compounded for or separate, would be as under, calculating the rate upon the amended wet rates recommended in my letter, No.

• Board's Procs., No. 749, of 16th March 1876.

348-21,* dated the 9th February 1876, as applicable to the Budwail, Sidhout, and Pullampett Taluqs:—

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33. Under G.O., No. 577, of 5th April 1864, the minimum charge for second crop in Trichinopoly was fixed at one rupee, and this rule was extended to Salem. Under wells in the lower group an abatement of half a rupee was allowed. I would recommend that this minimum charge be dispensed with as regards Cuddapah, and any reduction for lift be limited to lands unirrigable directly for the first crop. If the fixed charge is reduced consequent on the irrigation being from wells, the occasion for any allowance for lift disappears. Moreover, where sometimes the irrigation may be by flow and sometimes by lift, it is impossible to recognize any variation, and the abatement for lift is allowable only in cases where the irrigation may be solely by lift. Under the lower rates in Cuddapah there will rarely be any second crop irrigation, as the area under the lower tarams is generally very slight.

34. Should these proposals be approved, the charge in respect to each source of irrigation, if not wholly compounded for, could be adjusted at the time of Settlement by the Settlement Officer with reference to the circumstances of each source, and recorded in the descriptive memoir of the village and any doubt hereafter obviated.

35. According to paragraph 7 of his second letter, Mr. Horsley's proposal is limited to wells not within the prescribed distance of ten yards from the tank bund. I fail to see that this limit is applicable, for it refers to wells in unirrigated and not irrigated land. Moreover, wells at a considerable distance from the tank bund are often equally aided by the tank, provided they are well placed and within the fall away from or under current proceeding from tank.

36. At paragraphs 17 to 19 of his letter, Mr. Cox questions the water-supply returned for some of the tanks alluded to by Mr. Horsley. He shows that the rainfall in the neighbourhood registered 21 inches, and that while some of the tanks received a half supply, several are returned as not having stored any water at all. The rainfall

1875.	INCHES.
Cuddapah	25.09
North Arcot	26.16
Bellary	19.94
Nellore	28.85

of Cuddapah and several adjacent districts is marginally given; and, though for the whole season the fall does not appear very short, it was wonderfully partial in some localities, and not seasonable or sufficiently steady and continuous to throw any large supply into the tanks. I am inclined to agree with Mr. Cox that the recorded supply is open to doubt in some instances, regard being had to the area cultivated and matured under paddy and other irrigated crops, and the number of wells concerned. For instance the four months' tank in Yepperanla (4th village in Mr. Horsley's list) received seven days' supply or one-sixteenth of a full tank. There are no wells in the wet area, but with the aid of four wells in the adjoining dry land, 76.02 acres out of 81.25 acres in occupation were cultivated, 21.64 acres being paddy and 54.38 acres other irrigated crops. The whole was matured and 12.96 acres besides cultivated under second crop. The one-sixteenth of the tank could never have sufficed for the large area, or could the four wells in dry land have matured so many acres of cultivation.

ENCLOSURE No. 1.

From J. H. M. COX, Esq., Deputy Director of Revenue Settlement, Kurnool and Cuddapah Districts, to C. RUNDALL, Esq., Acting Director of Revenue Settlement, dated Cuddapah, 19th May 1876, No. 417-161.

* Enclosures (2) returned.

I HAVE the honor to forward, herewith, the information called for in your Proceedings of the 19th ultimo, No. 782-119,* and to submit a few

remarks with reference to the views expressed by Mr. Horsley on the subject of the augmentation of the wet ayacuts in this district.

2. Enclosed are three* statements exhibiting the result of the revision of ayacuts in the whole of the taluq of Koilkuntla, Kurnool District, and in seven and eighteen villages of Jamalamadugu and Proddatur respectively according to the accounts made up as far as the B Statements have been received from the Collector. The black ink figures represent the proposals made by this department, and the corrections in red ink show the changes as recorded by the Collector.

* I, II, and III.

3. In Koilkuntla it will be seen that the Collector's modifications are very insignificant, though in some villages there is a marked addition to the wet ayacut. On the whole, the total figures show a slight increase, but deducting the 432 acres odd relating to the waterspread of tanks which has been now transferred to wet, there is a decided decrease in the wet ayacuts in this taluq, although, as already said, there is a marked increase in some villages.

4. In Jamalamadugu and Proddatur, the Collector of Cuddapah has made great changes on our proposals, the nature of which may be learnt by a reference to the enclosed B Statements for three villages forwarded for your inspection, together with the plans and different Telugu accounts from which these statements have been compiled, as per accompanying Telugu List VII.

5. In one of these villages, objection is raised to the addition proposed to be made to the ayacut of a tank, although these new lands have apparently been growing paddy for some years past, while the cultivation of the old ayacut has continued without intermission, except here and there a field left waste because the ryots did not care to cultivate it that year.

6. The other cases relate to Doruvu and Dasabhandam wells, and these represent the bulk of the changes shown in the statements referred to in paragraph 2. The objections raised to the lands under these sources being classed as wet, is that they do not and cannot grow wet crops, i.e., paddy. This may, as a rule, be said of all wells, and I have explained both to Mr. Horsley and Mr. Gribble that we have not registered the lands altogether with reference to the crops grown on them, but in consideration of their receiving water from a fairly trustworthy Government source, and there are cases in which Mr. Horsley has approved of some lands growing similar crops being retained as wet, the only proviso that he has made being that they should be registered as "single crops."

7. Even in the case where a Dasabhandam well has been reported as out of repair, &c., we have retained the ayacut under it as wet for the simple reason that, as long as the Inam grant is allowed for its upkeep, it must be considered a Government source. Such cases are, of course, brought to the notice of the Tahsildar with a view to the Inamdar being served with a notice calling upon him to execute the necessary repairs. Meanwhile, as the ayacut cannot be transferred to dry until the Inam has been resumed, the ryots are informed that they are at liberty to claim remission of wet assessment until such time as the well is repaired, &c.

8. The Collector has also taken exception to the remark entered in the B Statements against well ayacut to the effect that lands newly transferred to wet have been so treated because they "have been invariably cultivated with wet crops." With reference to this I must explain, in the first place, that it is the form adopted from the statement received with the circular of instructions, and next that the garden crops grown with the help of water have been considered by us to all intents and purposes as not *bona fide* dry crops and therefore wet since we have nothing between. I shall feel obliged by the necessary instructions as to whether the form of remark should be altered in future.

9. Doruvu, Dasabhandam, and Itifak wells being recognized as Government sources, the ayacut under them must, I conclude, be registered as wet; otherwise there will be a large area left under Tirwa jastee which, I conclude, the present revision was intended to rectify. Where necessary

land under wells are more leniently treated in the Settlement than tank lands, and should the lands be poor they are more lowly classified and rated accordingly by us. The wet rate however is sure to be higher than the dry rate *plus* Rupees 1-2-0* water-rate leviable on lands growing raggi, &c.,

* Rupees 1-8-0 less one-fourth deduction for lift.

according to the water-rate rules now in force, but I do not think that the assessment fixed in the Settlement will be higher than they can really bear, particularly as no change is made for second crop. While showing all these wells as Government sources, we should not be justified, I think, in entering the ayacuts under a large number of them as dry. This will become a more serious matter in the sub-division taluqs with their numberless Dasabhandam wells.

10. I now come to the subject of Mr. Horsley's letter to the Board of Revenue. There is no doubt immense force in the assertion he makes that since the tanks are yearly becoming more and more silted up, the ayacuts must necessarily be reduced. I do not know upon what rules the extent of the ayacut originally registered as wet was fixed, but I observe in the face of the above assertion the fact that in many cases not only in this but also in other districts a larger extent of land is being irrigated under tanks and is paying Tirwa jastee, while, as far as can be ascertained, hardly any complaints have been made by the occupants of the regular wet lands, nor, as a rule, has any remission been granted on those ayacuts except in years when there has been a decided scarcity of water.

11. I do not ignore the fact that wells dug in the wet lands do help to keep up the cultivation, and I have already admitted in my letter of the 7th February, No. 105-47, that I recognize the great assistance these wells do afford, but I do not quite see how the thing is to be remedied in the way Mr. Horsley proposes. He advocates no increase to be made to the ayacut, and that the ryots should be allowed to take water from the wells in the wet lands free of charge. The second proposition might, I think, be allowed, provided the water is not drawn from the wells until that in the tank has been quite used up and none is flowing on to the wet lands from it. Some such rule as this seems necessary, as otherwise any amount of water might be drawn away from the proper wet lands, and even then the crops brought to maturity by means of these wells having already received some water from the tank would still be chargeable with Tirwa jastee.

12. According to Mr. Horsley's own admission, the men owning the lands which we are proposing to add to the wet ayacut being influential people will, notwithstanding their fields being registered as dry, still continue to take the water to the detriment of the wet lands, paying or not paying Tirwa jastee or water-rate as the case may be. The dry assessment *plus* water-rate being invariably less than the full wet rate will only tend to encourage this state of things, whereas, if the full wet assessment is charged, the man will most likely demand a full flooding, and this will no doubt cause the other ryots to call out or relinquish their lands for want of water. An inquiry might then be made into the matter and the necessary changes carried out.

13. This is, I think, the only way in which the thing can really effectually be righted, unless it is done at once scientifically by instituting a regular survey of all the tanks to determine their capacity and then calculate the area that such a volume of water can irrigate, fixing the ayacut with reference to levels, &c. Any other way of solving the question conclusively is to my mind impossible, and all that we can do in such a revision as is now being made is to examine the actual state of things on the ground, look into past accounts, to consult the wishes of the ryots, making such changes as seem necessary, and rectifying all glaring irregularities. There must and will be errors in judgment, and where this is the case it seems preferable in instances like these that the benefit should not be altogether on the side of the ryot who knows his own interest and may, I think, be trusted to bring to notice any injustice he considers he has really suffered when the matter can be better gone into and adjusted on its several merits.

14. I may here mention that I spoke to the District Engineer some days ago and asked him to let me know the result of the survey which it appears has been made in the case of one or two tanks that require repair, but I have not heard from him yet. He told me it would be no easy matter to determine the capacity of all the tanks and decide on what would be a fair ayacut for each.

15. In consulting the Revenue Accounts, the A Register referred to by the Collector is also examined as it forms the record of all lands which have already under authority been classed as wet, but the present state of things on the ground are likewise taken into account as mentioned above, and alterations made where necessary.

16. The cultivation details given in the Classification Registers do not afford the same help as the Revenue Accounts, as they only represent the state of things existing at the time of demarcation some ten or twelve years back. I must explain, however, that the latter do not in many cases bear out the facts ascertained by our examination in the field.

17. I am inclined also to think that the reports furnished with reference to the quantity of water received by the different tanks is not altogether to be relied upon. For instance, in the statement which accompanied Mr. Horsley's letter, two tanks in Madvaram and four out of the seven in Kuruguntapalli are said to have received no water at all, while the other three tanks in the latter village were about half filled. All nine tanks drain the same range of hills situated between their villages and Vantimitta at which latter place the rainfall registered in the District Gazette last year was nearly 8 inches in August, 6½ in September, and 4 in October, besides 1 in November and nearly 1½ in December.

18. Similarly, in Rajapuram, a six months' tank is said to have received 3 months' supply, and two 2 months' tanks only half a month's water each, while the other seven in the same village, all 2 months' tanks, got nothing. These all lie in one and the same narrow valley on the confines of the Budwai Taluq, and the large tank would appear to receive its supply from the small hills to the west instead of from the high Vellegonda range bordering Nellore, which may naturally be supposed to catch more of the rain that falls.

19. Another circumstance observable from Mr. Horsley's statement is that a larger extent of land was cultivated with wet crops under tanks two and three in Ramapuram, which are said to have received no water at all, than under the two shown to have had a fifteen days' supply, while in the one case there were only two and eight wells to help the irrigation against ten in the other.

20. With reference to paragraph 4 of the Proceedings under reply, I must explain that it is customary in this district to enter the water-rate charged on any land each year in the Kulwar or Asamiwar chitta of that year, and similar entries are made in the men's puttis if produced at the time of Jamabandi; otherwise the item only appears in the Kulwar chitta and the assessment collected accordingly.

21. In conclusion, pending the disposal of the different subjects now under discussion, I have deemed it advisable to postpone the introduction of the different changes proposed by Mr. Horsley into our accounts, and have left the entries in the registers now being submitted standing just as they are.

P.S.—I think the classification of the several crops as laid down in the table of rates to be charged for water supplied from the Irrigation and Canal Company given at page 251 of Mr. Gribble's Manual of this district shows that the garden crops of which we have been speaking ought rather to be called wet than dry. They come under Clause 3, whereas Clause 4 refers to dry crops.

(True Copy.)

(Signed) C. RUNDALL,
Ag. Director of Revenue Sett.

ENCLOSURES Nos. 2 to 27.—Statements, Ayacut Sketches, Telugu Accounts, &c.

ENCLOSURE No. 28.—List of Enclosures.

SUBMITTED to Government with reference to G.O., dated 10th January 1876,
No. 32.

2. In reporting on the agricultural prospects of the district at the end of last year, Mr. Horsley observed, "if Government would treat wet wells more liberally, the effects of a dry season would not be so severely felt by the ryot." Government in their order quoted above desired to have the views of the Collector, the Director of Revenue Settlement, and the Board of Revenue placed before them in greater detail regarding the question raised by the Collector. Mr. Horsley in conforming to the above requisition has also stated his views in regard to the revision of tank ayacuts, he being of opinion that the increase in the number of wells depends on the extension of tank ayacuts, and Mr. Rundall has followed him at considerable length in discussing this question. As, however, the matter was finally disposed of in the Proceedings of Government, dated 29th November 1872, No. 1,628, approving the rules framed by the Board for the guidance of officers engaged in the revision of tank ayacuts, and no necessity has been shown for a modification of the instructions then issued, it does not appear necessary for the Board to say more on this occasion than that they approve the proposals of the Acting Director at paragraph 17. The revision of ayacuts must be carried out on the principles enunciated by the Board and Government, and the Collector is not at liberty to ignore the rules by directing transfers at will. Caution should be exercised in proposing extensions of ayacuts, but the proposals must then be examined with reference to the rules, and must not be arbitrarily set aside. The Deputy Director's proposals for Prodlatur, Jamalnadugu, and Cuddapah will be allowed to stand subject to any modification that may be deemed necessary on appeal.

3. Turning to the question as to whether, under existing rules, Mr. Horsley has grounds for his assertion that the owners of wet wells, i. e., wells dug in irrigated land, are not treated with a sufficient amount of liberality, the Board observe that up to a quarter of a century ago if a ryot dug a well and irrigated crops therefrom he was liable to an enhanced assessment on the land so improved, but in 1852 under the orders of the Court of Directors this most unfair impost was abrogated, and the ryots received distinct assurances that in future they were to have the full benefit of their own improvements. To guard, however, against abuses, and to protect the

rights of the State in existing sources of irrigation, rules* were framed under the authority of Government restricting the privilege in certain cases. The first of these rules is—

"That if cases should arise when it is manifest that a well dug at a ryot's expense has drawn away water from a previously existing Government work, in such instance such well land shall not be wholly exempted from assessment, but a fair and equitable extra cess water-rate may be imposed."

4. It is this "fair and equitable extra cess water-rate" to which Mr. Horsley takes exception. If the principle involved in the rule is sound, viz., that where a well derives its supply wholly or in part from a source of irrigation which was in existence previous to the construction of the well, then undoubtedly wells dug in wet lands are liable to the extra cess, inasmuch as many of them derive their supply by surface flow from the work which irrigates their site, whilst it may be asserted of all that they are fed from the same source by percolation. Not to impose some charge in the case of irrigation from these wells would be an act of one-sided liberality, inasmuch as they tend greatly to check the surface flow to the lands situated at a distance from the

irrigating source, and if, as is often the case, they are excavated on the borders of irrigated lands and the water is used to irrigate dry lands, the supply to which the lower lands within the registered ayacut have a prior claim is unfairly intercepted.

5. Mr. Rundall points out that, although no allusion is made by Mr. Horsley to any previous correspondence bearing on the subject, it has been discussed on previous occasions, and that the Board have deliberately declined to recommend any modification of the rules with the view of exempting from charge irrigation from wells in wet lands, it being "an indisputable fact that such wells are generally made because their position with regard to the tank assures them a good supply of water, whilst it is almost impossible to discover whether the water for a second crop has been drawn directly from the tank by channels or indirectly by means of wells"—*Vide* Board's Proceedings, dated 28th October 1872, No. 2,037. The subject was again discussed at some length in the papers recorded in Board's Proceedings, dated 23rd October 1873, No. 2,169, and the Board affirmed the principles already enunciated in the existing rules. Copies of these papers will now be submitted to Government; the Board adhere to the views expressed therein, and see no reason for the enormous sacrifice of revenue which would result from compliance with Mr. Horsley's recommendation that all wells beyond the limit of distance from the tank bund which is now applicable only to wells sunk in dry land, should be free to "irrigate wet or dry or second crop on wet or dry land without payment of water-rate or second crop assessment."

6. Although there is no necessity for any exemption such as that proposed however, Mr. Rundall suggests more liberal treatment of second crop irrigation on wet lands at settlement, and further points out that the existing charge of one-fourth of the wet assessment when a second crop is raised partly by water from private wells was expressly sanctioned only pending the introduction of the new settlement, *vide* G.O., dated 12th June 1872, No. 923, and that definite orders are now required regarding the charge to be imposed subsequent to Settlement. Under the new Settlement composition for second crop charge, when the irrigation is precarious, is allowed at one-third and one-fourth of the first crop charge. Mr. Rundall proposes to add a one-fifth rate and to apply the several rates ordinarily as follows: the one-third rate to irrigation from tanks when the supply is precarious, the one-fourth rate to irrigation partly from tanks and partly from wells, the one-fifth rate to cases in which the supply is mainly dependent upon wells. Wherever the supply from any source to different parts of the ayacut varies considerably it will be treated by blocks.

The above rates are to be applied in cases of composition, and Mr. Rundall proposes that when the ryots do not consent to compound the second crop charge should be fixed at one-half, one-third, and one-fourth the first crop assessment in the cases noted above respectively according to the several degrees of certainty of supply.

He further proposes to dispense with the minimum charge of one Rupee per acre prescribed for Trichinopoly and subsequently extended to Salem so as to admit

of the above terms being offered to the lower classed lands, the area of which, however, is stated to be limited, and to restrict the abatement of one-fourth for lift to cases in which the irrigation is solely by lift, withholding the concession when the supply is obtained partly by flow and partly by lift.

G.O., dated 5th April 1864, No. 577.

7. These proposals appear to the Board as liberal as the circumstances justify, and they recommend their acceptance. The nature of the supply will be noted and recorded by the Settlement Officer and the charge adjusted accordingly.

8. The attention of the Collector is called to the concluding paragraph of Mr. Rundall's letter in which he shows good ground apparently for questioning the accuracy of the tank supply registers maintained by the Village Officers. The Collector should investigate the cases brought to notice and issue such orders as will ensure greater attention being paid to this important matter.

(True Copies and Extract.)

C. A. Galton
Acting Secretary

To the Secretary to Government, Revenue Department,
with twenty-seven original enclosures to be returned, and copies of
Board's Proceedings, dated 28th October 1872, No. 2,087; 23rd
October 1873, No. 2,169; and 13th March 1876, No. 723.
,, the Collector of Cuddapah.
,, the Acting Director of Revenue Settlement.

Recd. A. Grubert.
Recd. W. J. Lewis.

Wells—in wet lands in Cuddapah District—
Submitting to Government views of Board and
Director of Revenue Settlement regarding con-
sideration raised by means of —, and recommending
acceptance of Mr. Rundall's proposals in regard
to composition for second crop charges.

SEPTEMBER.
No. 2,216.

PROCEEDINGS, 1st SEPT. 1876, No. 2,216.

BOARD OF REVENUE,
MADRAS.

1876.

Recd. 14/10/76: 210

No. 2,269.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 4th September 1876.

Read the following letter from C. RUNDALL, Esq., Acting Director of Revenue Settlement, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated Madras, 15th July 1876, No. 2,811-79:—

In continuation of my letter, No. 2,379-58, of the 13th ultimo, I have the honor to submit* a further letter from the Deputy Director of Cuddapah giving cover to a

letter from the Acting Collector of that district, Mr. Gribble, on the subject of the revision of tank ayacuts and the treatment of wet lands irrigated by wells.

2. Mr. Gribble contends that paddy alone should be treated as a wet crop and that raggy when irrigated by a tank or well should still be regarded as a dry crop. I cannot speak for certain as to Cuddapah, but in other districts, when the water-supply is short, raggy is occasionally cultivated on the wet lands in place of paddy, and, therefore, when adjusting the wet ayacut, it is justifiable to deal with the fact whether the land is irrigated or not irrigated, irrespective of the question whether the crop irrigated is always paddy or sometimes raggy instead. Moreover, the irrigation of raggy will be found to generally prevail under the more indifferent sources of irrigation, and a set-off for this is allowed in the grouping, whereby a lower assessment is fixed for such lands than for those under more reliable sources of supply.

3. It is clear from what Mr. Gribble states at paragraph 8 that very considerable revision is urgently needed to the ayacuts of tanks in the subdivision. If the lands are unirrigable as a rule, and therefore waste, it will certainly be requisite to make considerable adjustments to dry, and there is really no foundation for Mr. Gribble's conclusion that the lands will be confirmed as wet and charged "double rate," or double-crop rates I presume. The rules provide equally for the transfer of land from wet to dry as from dry to wet, and such revision is essential.

4. It does not follow that the 17,637 acres referred to as under "Dasabandam Tank Ayacuts only" is relinquished area as stated by Mr. Gribble, for doubtless more or less is immemorial waste. Moreover, the extent does not refer to tanks only, but to channels and wells also. At page 236 of his Manual, to which Mr. Gribble alludes, it is stated that 13,966 acres under Dasabandam tanks were unoccupied in 1278 and 14,713 acres in 1282, and it is therefore inferred there is a tendency to relinquish the wet lands under these tanks. According to Appendix F, however, the area is rendered as 13,946 and 13,713 acres, respectively, and consequently the unoccupied area has not increased, but diminished during the period, and the conclusions drawn are seemingly mistaken.

5. The area unoccupied on the average during the past five years is detailed, and from the fluctuations observable Mr. Gribble repeats his impression that "the general tendency is an increase in the number of acres relinquished, and the mere fact of fluctuation shows, I think, that even now the ayacuts are larger than they should be, and that whenever a good season occurs the ryot at once takes up land which he

relinquishes in the following year." Under tanks there is but little variation save in one year, 1280. The comparison under the different heads is as follows:—

Items.	FASLIS.		Difference.
	1278.	1282.	
Tanks	13,946	13,713	— 233
Channel	2,111	2,830	+ 719
Wells	1,148	1,094	— 54
Total ...	17,205	17,637	+ 432

The increase is thus confined to the unoccupied area under channels, and it occurred in Fasli 1279. There must have been some special cause for this, as very little of the land then given up has been since occupied.

6. I can but regard Mr. Gribble's further remarks based on the proportion of the total cultivable area that is in occupation as misleading also. According to the statistics given in his Manual the cultivable extent is 3,533,737 acres, and it is

Appendix E, No. 5.

stated that only one-third of this, or 1,225,082 acres, is in occupation. To determine the extent actually in occupation the area held under Inam tenure, 665,975 acres, should be added to the foregoing, making 1,891,057 acres. Half, and not one-third of the total cultivable area of the district, as given in the Manual, may therefore be said to be in occupation. Of the remaining half, probably a good part is not really cultivable, and the bulk of the area may be described as consisting of the poorer and indifferent qualities of soil. The tendency of the settlement is invariably to lower the assessment on the indifferent soils, and hence the new rates applicable to waste lands require, as a rule, to be regarded as more favorable to the extension of occupation than the former, or modified paimaish rates which they supersede. In the three taluqs first settled—Jammalamadugu, Proddatur, and Cuddapah—the proportion of the assessed land unoccupied was only 11 per cent., and in the next three taluqs reported on—Budwail, Sidhout, and Pullempet—30 per cent. There is, of course, other land that has never been yet brought under cultivation.

7. As regards the marked tendency to throw uplands, and especially wet land, I append below a statement compiled from the district returns, as to lands relinquished and taken up during the past five years, 1280 to 1284 Fasli:—

	Dry.	Wet.	Total.
<i>Principal Division.</i>			
Relinquished	16,278	2,337	18,615
Taken up	17,080	3,063	20,143
Difference ...	+ 802	+ 726	+ 1,528
<i>Subdivision.</i>			
Relinquished	20,586	1,756	22,342
Taken up	16,079	1,369	17,439
Difference ...	— 4,516	— 387	— 4,903
Total, Relinquished	36,864	4,093	40,957
Do. Taken up	33,150	4,432	37,582
Difference ...	— 3,714	+ 339	— 3,375

8. As regards the Principal Division of Cuddapah, there has been no decrease either of dry or wet occupation. In the subdivision there has been a falling off of 3,714 acres in dry and 387 acres in wet; but, as the cultivated area exceeds five lakhs of acres, the extent is inconsiderable.

9. The falling off in the wet is the main question that Mr. Gribble raises, and the foregoing details, though they do indicate a slight decrease of 387 acres in the subdivision, can hardly be regarded as supporting the Acting Collector's view of the question.

ENCLOSURE No. 1.

From J. H. M. COX, Esq., Deputy Director of Revenue Settlement, Kistna, Kurnool, and Cuddapah Districts, to C. RUNDALL, Esq., Director of Revenue Settlement, Madras, dated Cuddapah, 21st June 1876, No. 521-218.

At the Acting Collector's request I have the honor to send you, herewith, a copy of the

No. 36, dated 10th June 1876.

letter which he has written to me with reference to mine to you, dated 19th ultimo,

No. 417-165, on the subject of the revision of ayacuts, &c., in this district, and in doing so beg to make two or three remarks on the same.

2. Paragraph 3.—Mr. Gribble argues that, because in the table of rates adopted by the Irrigation Company, rice is included in the same head as sugar-cane, &c., and charged more than garden raggy, garden korra, &c.; the latter should not be classed as wet. In the Government water-rate table I observe that rice is charged less than sugar-cane, &c., and the same rate (4 Rupees) as that fixed by the Irrigation Company for the garden crops above referred to. I do therefore see the great hardship in this case, particularly when no charge is made for a second crop under wells, which are the sources under which these crops are generally grown.

3. Paragraph 4.—The mere puddles of tanks in the subdivision to which Mr. Gribble refers are those the circumstances of which I have already proposed should be considered to see whether they might not be abandoned and the lands under them transferred to dry, in which case, of course, the wells would also not be chargeable.

4. Paragraph 5.—The assertion that the Tirwajasti lands were held by rich and influential ryots was not mine, but Mr. Horsley's (vide paragraph 5 of his letter of the 24th February, No. 47, to the Board).

5. Paragraph 6.—I explained in paragraph 14 of my letter why I thought that in this case an exception should be made and the benefit lie on the side of Government. If the benefit were given to the ryot I considered that it might lead to evasion of assessment, and that he was quite able to represent any injustice that might be done while the fact of any extent of ayacut being left waste would at once attract the attention of the Revenue authorities and lead them to make an inquiry into the matter.

6. Paragraph 8.—The figures adduced by Mr. Gribble refer to the subdivision taluqs and as he himself admits in paragraph 9 the circumstances of that part of country are quite different from those of the main division so that his arguments here cannot I think at all apply. I quite expect that the ayacut in the subdivision taluqs will require reduction, their circumstances will, I fancy, be found to be much the same as those of the tanks in the northern taluqs of the North Arcot District, where the features of the country are very similar.

ENCLOSURE No. 2.

From J. D. B. GRIBBLE, Esq., Acting Collector of Cuddapah, to J. H. M. COX, Esq., Deputy Director of Revenue Settlement, Cuddapah, dated Madanapalli, 10th June 1876, No. 36.

I HAVE the honor to acknowledge the receipt of a copy of your letter, No. 417-164, dated

Received with the Deputy Director's letter, dated 2nd 19th ultimo, to the address of the Director, June 1876, No. 455-247.

and to thank you for thus affording me an opportunity of making some remarks on points on which I venture to disagree with you.

2. I find that the changes alluded to by you in paragraph 4, which have been made in the proposals for the taluqs of Jammalamadugu and Proddatur, have been made by Mr. Horsley after receipt of a cultivation statement for ten years, showing the actual cultivation of each field. In almost all cases where Mr. Horsley objected to the extension of ayacuts it was found that the fields entered by the Settlement Department as "invariably cultivated with wet crops" had in reality been cultivated with dry crops, such as raggy, korra, horse-grain, and occasionally only paddy. It is, of course, possible that these accounts may be incorrect, but they are supposed to be drawn up from the village accounts, which formed the basis of the annual settlements, and it would be therefore dangerous to impugn their veracity. You will remember one case in which the ten year account signed by the village officials differed considerably from an account drawn up by the Settlement Department, which also was signed by the village officials. The village officials in this case were called upon to explain why they had signed contradictory accounts, and in reply stated that the account given to the Settlement Department was incorrect. This matter is still under inquiry.

3. The gist of the whole matter is what constitutes a "wet crop," and in paragraph 8 of your letter you say garden crops grown with the help of water have been considered by us to all intents and purposes as not *bona fide* dry crops, but I do not agree that therefore they should be charged wet assessment. It is true that there is nothing between, but I think an intermediate rate should be fixed. On turning to the rules for the Irrigation Canal Company I find there are four kinds of crops with three different rates of assessment—

1. Crops requiring continuous supply, first crop	...	...	...	...	RS.
2. Do. do. second crop	...	...	...	...	6

Under this head are included only rice, sugar-cane, betel leaves, coconuts, plantains, saffron, and fruit trees.

3. Crops requiring frequent floodings	...	...	...	...	RS.
	...	...	...	...	4

Under this head are classed garden raggy, garden korra, garden onions, chillies, sweet potatoes, tobacco, indigo, and brinjals.

4. Crop requiring occasional floodings	...	...	...	...	RS.
	...	...	...	...	2

field raggy, field korra, field chillies, field tobacco, cotton, grain, and oil seeds. Korra, raggy, and gram pay therefore a considerably lower assessment than rice, but under the system adopted by the Settlement Department they are made to pay exactly the same assessment, and their cultivation brings a field under the head "invariably raises a wet crop." This, I submit, is scarcely just, and it was for this reason that I believe Mr. Horsley made so many objections to the extension of ayacuts in the B Statements.

4. In the case of wells, I admit the difficulty under which the whole question labors. In paragraph 6, you say: "The objections raised to the lands under Doravu, Dasabandam, and Itafak wells being classed as wet, is that they do not and cannot grow wet crops, i.e., paddy. This may, as a rule, be said of all wells, and I have explained both to Mr. Horsley and Mr. Gribble that we have not registered the lands altogether with reference to the crops grown on them, but in consideration of their receiving water from a fairly trustworthy Government source." It seems to me that if a well "does not and cannot grow" a wet crop it is unjust to make it pay a full wet assessment, whatever be the source it gets its water from. As a matter of fact, however, these wells depend very little upon the tanks below which they stand. During this year numberless cases came to my notice during the settlement of the Volipad Taluq, in which a tank had received absolutely no water whatsoever, but yet a large portion of the ayacut raised wet crops from the wells. In other cases, long after the tanks had run dry, the irrigation was continued from the wells and the crop raised. There are, in the district, to my certain knowledge, 46,904 wells, and there may be many more, of which I have not been informed. I am not quite prepared to endorse the statement that wells do not and cannot grow a crop of paddy, but I am confident that in thousands of acres which now grow paddy, and pay a wet assessment to Government, a wet

crop would not be raised were it not for the wells. These wells are, for the most part, situated in the valleys where the tanks also lie, and it is often urged that, because they are in the midst of wet cultivation, they must gain a certain supply of water owing to the percolation from the irrigated fields around them, and therefore they should pay a wet assessment, since the water which percolates is from a Government source. This is partly, but not entirely true. The wells are dug in the drainage basins for the same reason that the tanks are built there, because water is available, but they are also dug there so as to prove a help to the Government tanks when their supply runs short. As long as the tank is full and the fields around are irrigated, some water no doubt percolates into the well, but what is to be said when in a year like this the tank is empty and the well is full. This is especially of importance in the subdivision taluqs (to which the settlement has not yet come) where there is an immense number of tanks (4,291), the majority of which are mere puddles, out of which the water speedily evaporates, but which nevertheless succeed in raising a small wet crop, in consequence of the aid given by the well. As far as I understand, what Mr. Horsley maintained (there I fully agree with him) was that if, when it is found that these wells have raised wet crops (which seem to include almost every crop which requires water) in lands beyond their registered ayacut, these lands are classed and charged as wet, it will be unjust. At present such lands pay a dry rate, say, 1 Rupee plus Tirwajasti rate Rupees 3 or 4 minus one-fourth for lift, when classed as wet they will have to pay double. At present it is not usual to allow remission for ayacut lands left waste, if Tirwajasti lands are cultivated unless good reason can be shown, so that I do not think that the Government lose much by the present arrangement, which, though it gives additional labor to the settling officer, is in my opinion more just to the ryot.

5. I am not quite prepared to say that the ayacut lands are usually held by the poor ryots, and the Tirwajasti lands by the rich and influential ones (paragraph 13 of your letter), often the reverse is the case; were it so, when these Tirwajasti lands are classed as wet, the state of things would be no different than it has been hitherto, and there could be no reason for the "other ryots to call out or relinquish their lands for want of water," for they would be no worse off than they were before. If, however, the effect of increasing the ayacuts should be to cause ryots to relinquish their lands, it is clear that the wet ayacuts will have been increased beyond their capacity of supply. You state, however, (paragraph 13) "an inquiry might then be made into the matter and the necessary changes carried out." This is true, but such an inquiry would in reality be doing the whole work over again, for here we have to deal with 46,904 wells and 4,972 tanks.

6. I see that there are many difficulties in the way of a scientific measurement of the capacity of each tank, but this I feel sure is the only true way of settling the question. I venture to differ from you (paragraph 14) that "there must and will be errors of judgment, and where this is the case, it seems preferable in instances like these that the benefit should not be altogether on the side of the ryot." It is, of course, a dangerous thing to lay down a sweeping rule, but, if one is to be laid down, I am inclined to exactly the opposite, viz., that in all cases of doubt or error the benefit should be given to the ryot.

7. It is, of course, quite possible, as you say in paragraphs 17 and 18, that the rain accounts are not always quite trustworthy. In the instances you cite they may have been incorrect, but I can confidentially affirm that since I have been in the district, I have seen numberless cases exactly similar to those cited by Mr. Horsley, where I have, with my own eyes, seen the tank empty and the crops watered solely from the wells.

8. Regarding the general question of decreasing instead of increasing the ayacuts, I would cite one example, which will, I think, bear out Mr. Horsley's opinion that they should not be increased. I allude to the tabular statement quoted on page 236 of my Manual, which shows that out of Dasabandam tank ayacuts only in the subdivision 17,637 acres, assessed at Rupees 88,231, have been relinquished and are now lying waste for want of water. Under many of these tanks there are wells which supply water to dry lands, and pay a small rate of from 4 to 5 Rupees. These lands will now probably be classed as wet and be charged double rate, and the ayacuts already partly relinquished will be nominally increased. Again, I would beg you to refer to Appendix F

on page 331 of my Maqul, which shows the actual number of unoccupied acres under Dasabandam tanks, channels, and wells in the subdivision for each of five faslis ending with Fasli 1282.

The figures stand thus:—

Fasli.	Number of Acres.
1278... ..	17,205
1279... ..	17,319
1280... ..	15,861
1281... ..	17,219
1282... ..	17,637

These figures show a considerable fluctuation specially under tanks, for the figures under channels and wells are very nearly the same for each year. The general tendency, however, is an increase in the number of acres relinquished, and the mere fact of fluctuation shows, I think, that even now the ayacuts are larger than they should be, and that whenever a good season occurs, the ryot at once takes up land, which he relinquishes in the following year. This question of unoccupied land is one of grave importance. Out of 3,532,737 acres of land fit for cultivation in the district only 1,225,082 are cultivated, and only one-third of the total area is in occupation. I cannot think that a settlement, the tendency of which is to increase the assessment, is one calculated to render the cultivation of these waste acres more practicable. It is true that the new rates are lower than those of Munro's pynaish, but it must be remembered that after these pynaish rates had been in force for sixteen years, and the country was almost ruined by them. Sir Thomas Munro himself reduced them by 25 and 33 per cent. The present settlement, however, though showing a less total assessment than the old pynaish, shows a considerably higher settlement than the one introduced by Sir Thomas Munro when he reduced his own rates by 25 and 33 per cent., and this after the price of labor, production, living, and everything else has enormously increased. It is true that the ryot profits from the increased price of grain, but he gains a profit only on the grain he sows, whilst he has to pay an increased rate for twenty different other things. The great test of a just settlement must be a rise in the selling price of land and the bringing under cultivation of waste lands. At present there is, as I have shown, a marked tendency to throw up lands, and the monthly statements of sales of land show that the selling price of land is very low, and that the arrears of a year's kist are seldom realized by the sale of a field.

9. I feel that some apology is due for citing subdivisions figure regarding a question which has arisen in the main division, since the circumstances of the subdivision are so different. The settlement, however, will soon come to the subdivision, and the principle once established, it will, I presume, be carried out throughout the district. Mr. Horsley's objections to the increase of ayacuts were founded on a long experience in the district and an intimate knowledge of almost every village and tank. My objections are not backed by such an experience as his, but they are founded on some local knowledge and many inquiries, and have been formed independently of Mr. Horsley's. These objections have, therefore, some claim to consideration, and, though I scarcely dare hope that they will carry the day, I would earnestly ask that the whole matter may be reconsidered before any step is taken, which may result in an increase of the ayacuts especially in the subdivision.

(True Copy.)

(Signed) J. H. M. COX,
Dy. Director of Revenue Settlement.

SUBMITTED to Government in continuation of Board's Proceedings, dated 1st September 1876, No. 2,216.

2. The Board see no necessity for modifying the views already expressed in the Proceedings quoted above. With reference to the remarks of Mr. Gribble on the manner in which the revision of tank ayacuts is being conducted, the Board consider that the determination of the area to be classified as "Wet" and "Dry" must

depend upon the extent to which water can ordinarily be supplied, not on the nature of the crop raised. This principle was enunciated by the Board after full discussion and approved in G.O., dated 29th November 1872, No. 1,628.

(True Copies and Extract.)

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

To the Secretary to Government, Revenue Department.

„ the Director of Revenue Settlement, with two enclosures returned.

Copy to the Collector of Cuddapah.

Exd. A. Gruber.

Revenue Department

Proceedings of the Board of Revenue
Dated 4th September 1876.

From $\frac{2811}{79}$ Read the following
C. Randall Esquire
By Director of Revenue Settlement
To C. B. Walton Esquire
Secretary to the Board of Revenue

Sir, In continuation of my letter No. 2379-
of the 13th ultimo, I have the honor to sub-
mit a further letter from the Deputy Director
of Madras, giving over to a letter from
the Acting Collector of that District,
Mr. Grille, on the subject of the revision
of tank ayakuts and the treatment of well
lands irrigated by wells.

2. Mr. Grille contends that Paddy alone
should be treated as a wet crop, and that
Ragi when irrigated by a tank or well
should

1876.

Board of Revenue,

MADRAS.

PROCEEDINGS, 4TH SEPTEMBER 1876, No. 2,263.

Encl.

Received

SEPTEMBER.

No. 2,263.

Revision of tank ayakuts and treatment of well
lands irrigated by wells—in Cuddalore District.—
Submitting to Government, with Board's views,
further report from Director of Revenue Settle-
ment on subject of —.

In original to
has returned

should still be regarded as a dry crop. I cannot
state for certain as to Guddapah, but in
other Districts, when the water supply is short,
Ragi is occasionally cultivated in the wet
lands in place of Paddy; and therefore
when adjusting the wet Ayakats it is just-
ified to deal with the fact whether the
land is irrigated or not irrigated, irrespective
of the question whether the crop irrigated
is always Paddy or sometimes Ragi instead.
Moreover, the irrigation of Ragi will
be found to generally prevail under the
more indifferent sources of irrigation,
and a set off for this is allowed in
the grouping, whereby a lower assessment
is fixed for such lands, than for those
under more reliable sources of supply.

It is clear from what Mr Gribble

38
states at para 8, that very considerable
revision is urgently needed to the Ayakats
of Panks in the subdivision. If the lands
are unirrigable as a rule, and therefore
waste, it will certainly be requisite
to make considerable adjustments to
Dry, and there is really no foundation for
Mr. Gribble's conclusion that the lands
will be confirmed as wet and charged
"double rate" or double crop rates, I pre-
sume. The rules provide, equally for the
transfer of land from Wet to Dry, as from
Dry to Wet; and such revision is essential.
4. It does not follow that the 17637
Acres referred to as under "Dasabandam
Lack Ayakats only" is relinquished area
as stated by Mr Gribble, for double crop

more

more or less is immemorial waste. Moreover, the extent does not refer to banks only, but to channels and wells also. At page 236 of his Manual, to which Mr. Gribble alludes, it is stated that 13966 acres under Darabandam banks were unoccupied in 1278, and 14713 acres in 1282; and it is therefore inferred there is a tendency to relinquish the wet lands under these banks. According to appendix F, however the area is rendered as 13946 and 13713 acres respectively; and consequently the unoccupied area has not increased but diminished during the period, and the conclusions drawn are seemingly mistaken.

5. The area unoccupied on the average during the past five years is detailed, and

39
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Items	Acrees		Differ. = acres
	1278	1282	
Banks	13946	13713	- 233
Channel	2111	2830	+ 719
Wells	1148	1094	- 54
	17205	17637	+ 432

The

The increase is thus confined to the unoccupied areas under channels and it occurred in fasli 1279. There must have been some special cause for this, as very little of the land then given up has been since occupied.

6. I can but regard Mr. Lytelle's further remarks based on the proportion of the total cultivable area that is in occupation as misleading also. According to the statistics given in his Manual Appendix E. p. 5 the cultivable extent is 2533737 acres, and it is stated that only one third of this, or 1225082 acres is in occupation. It determines the extent actually in occupation the areas held under Guam Revenue bogs & Pecos, should be added to the foregoing making 1871057 acres. Half

40
and not one third of the total cultivable area of the District, as given in the Manual, may therefore be said to be in occupation. Of the remaining half, probably a good part is not really cultivable, and the bulk of the area may be described as consisting of the poorer and indifferent qualities of soil. The tendency of the settlement is invariably to lower the assessment on the indifferent soils, and hence the new rates applicable to waste lands, require, as a rule, to be regarded as more favorable to the extension of occupation than the former, or modified paimaish rates which they supersede. In the three Taluqs first settled. Jammalamadugu, Proddatur, and

and Cuddapah - the proportion of the
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 append below a statement compiled from
 the District returns, as to lands relinquished
 and taken up during the past five years
 1280 to 1284 fuch.

	Dry	Wet	Total
<u>Principal Division</u>			
Relinquished	16278	2337	18615
Taken up	17080	3063	20143
Difference	+802	+726	+1528
<u>Sub-Division</u>			
Relinquished	20586	1756	22342
Taken up	16070	1369	17439
Difference	-4516	-387	-4903
<u>Total</u>			
Relinquished	36864	4093	40957
Taken up	33150	4432	37582
Difference	-3714	+339	-3375

8. As regards the Principal Division of
 Cuddapah there has been no decrease
 either of dry or wet occupation. In the
 sub-division there has been a falling
 off of $37\frac{1}{4}$ acres in dry and 387 acres in
 wet; but as the cultivated area exceeds
 5 laes of acres, the extent is inconsider-
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9. The falling off in the wet is the
 main question that Mr. Spillie raises,
 and the foregoing details, though they
 do indicate a slight decrease of 387
 Acres in the subdivision, can hardly
 be regarded as supporting the Acting
 Collector's views of the question.

Revenue Settlement Office - Madras. } I have &c
 15 July 1876 } (Signed) C. Randall
 By Director of
 Revenue Settlement
 Enclosure

Enclosures

From

N^o 36

J. D. B. Lybille Esquire

Collector of Cuddapah

To

J. H. M. Cox Esquire

Dy Director of Revenue Settlement
Cuddapah

Sir,

I have the honor to acknowledge the receipt of a copy of your letter N^o $\frac{417}{164}$, dated 2nd June 1876, ^{Received with the Dy. Dir's letter N^o $\frac{465}{247}$} relating to the address of the Director and to thank you for thus affording me an opportunity of making some remarks on points on which I venture to disagree with you.

2. I find that the changes alluded to by you in para 4, which have been made in the proposals for the Taluqs of Jammalamadign & Proddatur, have been made by Mr. Horsley after receipt of a cultivation statement for 10 years

42
showing the actual cultivation of each field. In almost all cases where Mr. Horsley objected to the extension of Aya kuts, it was found that the fields entered by the Settlement Department as "invariably cultivated with wet crops" had, in reality, been cultivated with dry crops such as raggy, corra, horsegram, and occasionally only paddy. It is of course possible that these Accounts may be incorrect, but they are supposed to be drawn up from the village accounts, which formed the basis of the annual settlements, & it would be therefore, dangerous to impugn their veracity. You will remember one case in which the 10 years Accounts signed by the village

system adopted by the Settlement Department;
they are made to pay exactly the same as
a peasant and their cultivation brings a
field under the head invariably raises a
"wet crop". This I submit is scarcely just,
and it was for this reason that I believe
Mr. Horsley made so many objections
to the extension of Agents in the B Statements.
In the case of wells, I admit the diffi-
culty under which the whole question
labours. In para 16, you say "The objections
raised to the lands under Dornu, Dasa-
bandum, and Itifak wells being classed
as W A, is that they do not and cannot
grow wet crops, i.e. Paddy. This may, as
a rule, be said of all wells; and I have
explained both to Mr. Horsley and Mr
Gibble that we have not registered

the

44
the lands altogether with reference to the
crops grown on them, but in consideration
of their receiving water from a fairly
trustworthy Government source". It seems
to me that if a well "does not and
cannot grow" a wet crop it is unjust
to make it pay a full wet assessment
whatever be the source it gets its
water from. As a matter of fact however,
these wells depend very little upon the
banks below which they stand. During
this year numberless cases came to my
notice during the settlement of the Voilpand
Taluk, in which a bank received absolutely
no water whatsoever, but yet a large
portion of the Agent raised wet crops
from the wells. In other cases long after
the banks had run dry, the irrigation
was

was continued from the Wells and the crop raised. There are, in the District, to my certain knowledge 46904 wells and there may be many more, of which I have not been informed. I am not quite prepared to endorse the statement that wells do not and cannot grow a crop of paddy but I am confident that in thousands of Acres, which now grow paddy, & pay a wet assessment to Government, a wet crop would not be raised, were it not for the wells. These wells are, for the most part, situated in the valleys where the Tanks also lie, and it is often urged that because they are in the midst of wet cultivation, they must gain a certain supply of water owing to the percolation from the irrigated fields around them, and therefore they should pay a wet assessment since

45
since the water which percolates is from a Government source. This is partly, but not entirely true. The wells are dug in the drainage basins for the same reason that the Tanks are built there, because water is available, but they are also dug there so as to prove a help to the Government Tanks when their supply runs short. As long as the Tank is full and the fields around are irrigated, some water no doubt percolates into the well, but what is to be said, when in a year like this the Tank is empty, and the well is full. This is especially of importance in the sub-division Bahags (to which the settlement has not yet come) where there is an immense number of tanks (429) the majority of which are mere puddles, out of which the water speedily evaporates.

evaporates, but which nevertheless succeed
in raising a small wet crop, in consequence
of the aid given by the well. As far as
I understand, what Mr. Horsley main-
tained (there I fully agree with him)
was that if, where it is found, that
these wells have raised wet crops,
(which seem to include almost every
crop which requires water) in lands
beyond them registered Ayaunt, these
lands are classed and charged as wet,
it will be unjust. At present such
lands pay a dry rate, say 1 Rupee,
plus Dirwajasti rate Rs 3 or 4 minus $\frac{1}{4}$
for lift; when classed as wet they will
have to pay double. At present it is
not usual to allow remission for Ayaunt
lands left waste, if Dirwajasti lands

are cultivated unless good reason can be
shown, so that I do not think that the
Government lose much by the present
arrangement, which though it gives
additional labor to the settling officer
is in my opinion more just to the ryot-
5. I am not quite prepared to say
that the Ayaunt lands are usually
held by the poor ryots, and the Dirwa-
jasti lands by the rich and influential
ones (para 13 of your letter) often the
reverse is the case; were it so, when
these Dirwajasti lands are classed
as wet, the state of things would be
no different than it has been hitherto,
and there could be no reason for the
"other ryots to call out or relinquish their
lands for want of water" for they would

be

be no worse off than they were before.
If however the effect of increasing the
Agents should be to cause ryots to relin-
quish their lands, it is clear that the
Well Agents will have been increased
beyond their capacity of supply. You state
however (para 13) "an inquiry might then
be made into the matter and the necessary
changes carried out". This is true but such
an inquiry would in reality be doing
the whole work over again, for, here
we have to deal with 46904 wells
and 4942 tanks.

b. I see that there are many diffi-
culties in the way of a scientific
measurement of the Capacity of each
Tank, but this I feel sure is the only
true

17
true way of settling the question. I am
-Pare to differ from you (para 14) that
"there must and will be errors of judg-
-ment, and where this is the case, it
seems preferable in instances like these
that the benefit should not be altogether
on the side of the ryot". It is of course
a dangerous thing to lay down a sweeping
rule but if one is to be laid down I am
inclined to exactly the opposite; viz that
in all cases of doubt or error, the benefit
should be given to the ryot.

7. It is of course quite possible, as you
say in paras 17 & 18, that the rain accounts
are not always quite trustworthy. In
the instances you cite they may have
been incorrect, but I am confidently
affirm that since I have been in the
District, I have seen numberless cases
exactly

exactly similar to those cited by Mr. Horsley, where I have, with my own eyes, seen the Tank empty, and the crops watered solely from the Wells.

8. Regarding the general question of decreasing instead of increasing the Agents, I would cite one example, which will I think bear out Mr. Horsley's opinion that they should not be increased. I allude to the tabular statement quoted on page 236 of my Manual, which shows that out of Basabandham Tank Agents only in the Sub-Division 17637 acres offered at Rs 88231 have been relinquished and are now lying waste for want of water. Under many of these Tanks there are wells which supply water to dry lands, and pay a small rate

48
of from 4 to 5 Rupees. These lands will now probably be classed as Wet & be charged double rate and the Agents already partly relinquished will be nominally increased. Again, I would beg you to refer to Appendix E on page 331 of my Manual, which shows the actual number of unoccupied acres under Basabandham Tanks, channels, and wells in the subdivision for each of five years ending with 1282.

The figures stand thus	Year	No. of Acres
1278	—	17,205
1279	—	17,319
1280	—	15,861
1281	—	17,219
1282	—	17,637

These figures show a considerable fluctuation specially under Tanks, for the figures under Channels & Wells are very nearly the same for each year. The general tendency however is an increase in the number of acres relinquished

and the mere fact of fluctuation shows, I think, that even now the Ryas are larger than they should be, and that whenever a good season occurs, the ryot at once takes up land which he relinquishes in the following year. This question of unoccupied land is one of grave importance. Out of 3533737 Acres of land fit for cultivation in the District only 1225082 are cultivated, and only one third of the total area is in occupation. I cannot think that a settlement, the tendency of which is to increase the apportionment is one calculated to render the cultivation of these Waste Acres more practicable. It is true that the new rates are lower than those of Munro's Ryas, but it must be remembered that after these Ryas rates had been in force for 16 years, & the country

48
was almost ruined by them - Sir Thomas Munro himself reduced them by 25 and 33 per cent. The present settlement, however, though showing a less total apportionment than the old Ryas, shows a considerably higher settlement than the one introduced by Sir Thomas Munro when he reduced his own rates by 25 and 33 per cent, and this after the price of labour, production living and everything else has enormously increased. It is true that the ryot profits from the increased price of grain, but he gains a profit only on the grain he sows, whilst he has to pay an increased rate for twenty different other things. The great test of a just settlement must be a rise in the selling price of land & the bringing under cultivation of waste lands. At present there is, as I have shown, a marked tendency

to throw up land, and the monthly statements of sales of land show that the selling price of land is very low, and that the arrears of a year's rent are seldom realized by the sale of a field.

9. I feel that some apology is due for citing subdivisions figures regarding a question which has arisen in the main division, since the circumstances of the subdivision are so different. The settlement, however, will soon come to the subdivision, and the principle once established, it will I presume be carried out throughout the District.

Mr. Horsley's objections to the increase of Agents were founded on a long experience in the District, and an intimate knowledge of almost every village & bank.

My

50
My objections are not backed by such an experience as his, but they are founded on some local knowledge, and many inquiries, and have been formed independently of Mr. Horsley's. These objections have therefore some claim to consideration, and though I scarcely

dare hope that they will carry the day, I would earnestly ask that the whole matter may be reconsidered before any step is taken, which may result in an increase of the Agents especially in the subdivision.

I have to
Cuddapah Collector's Office } 14/3 Mr. Ramaswamy
at Madanapalle 10 June 1870 } Dy. Secy. for Collector.

Rev. Sett. Office } True Copy
Cuddapah } 14/3 J. M. M. Cox
June 1870 } Dy. Secy. Rev. Sett.

From J. M. M. Cox Esq.
Dy. Director of Rev. Settlement - Krishna Kuruvu
C. Randall Esq.
Director of Revenue Settlement Madras
No 53/218

Sir, At the Acting Collector's request I have the honor to send you herewith a copy of the letter which he has written to me with reference to mine to you dated 17th ultimo, No 3637 18th June 1876. on the subject of the Revision of W.A. Ryants in this District and in doing so beg to make two or three remarks on the same.

2. Mr. Griddle argues that because in the table of rates adopted by the Irrigation Company, Rice is included in the same head as Sugarcane and charged more than garden Ruggi, garden Korma &c. the latter should not be charged as W.A. In the Government water rate table I observe that Rice is charged less than sugar cane &c. and the same rate (4 Rs) as that fixed by the Irrigation Company for the garden crops above referred to. I do not therefore see the great hardship in

Para 4.

Para 5.

Para 6.

in this case particularly when no charge is made for a second crop under wells which are the sources under which these crops are generally grown.

3. The mere puddles of banks in the subdivision to which Mr. Griddle refers are those the circumstances of which I have already proposed should be considered to see whether they might not be abandoned and the land under them transferred to Dry in which case of course the Wells would also not be chargeable.

4. The assertion that the Tirwajasti lands were held by rich and influential ryots was not mine but Mr. Horsley's vide para 5, of his letter of the 24th February 1876 to the Board.

5. I explained in para 14 of my letter why

I thought that in this case an exception should be made and the benefit lie on the side of Government. If the benefit were given to the ryots I considered that it might lead to evasion of a payment & that he was quite able to represent any injustice that might be done while the fact of any extent of Agency being left waste would at once attract the attention of the Revenue Authorities and lead them to make an inquiry into the matter.

6. The figures adduced by Mr. Gribble refer to the sub-division Taluqs and as he himself admits in para 9 the circumstances of that part of country are quite different from those of the main division so that his arguments here cannot I think at all apply.

32
apply. I quite expect that the Agent in the sub-division Taluqs will require reduction, their circumstances will I fancy be found to be much the same as those of the Banks in the northern Taluqs of the North Arcot District where the features of the country are very similar.

I have to
Revenue Settlement Mr J. M. Core.
Officer - Cuddalore. } By Dir. of Rev. Sett.
2nd June 1876.

Submitted to Government in conformity of Board's Proceedings dated 1st September 1876, No. 2246.

2. The Board see no necessity for modifying the views already expressed in the Proceedings quoted above. With reference to the remarks of Mr. Gribble on the manner in which the revision of Tank Agents is being conducted; the Board consider that the determination

52
determination of the area to be classified
as "wet" and "dry" must depend upon the extent
to which water can ordinarily be supplied, not
on the nature of the crop raised. This principle
was enunciated by the Board after full
discussion and approved in G. O. dated 29th Novem-
ber 1872, No. 1628.

True Copies & Extracts

Wm. H. Hunt
Acting Secretary

To
The Secretary to Government
Revenue Department

Memo for the

54

Board's Proceedings 1876
1876 vol 2246 & 2766

Early this year, Mr. Hordley
Collector, Cuddalore, submitted
in a report he submitted
on the state of the season in
his district, observed that
if Government would liberally
with well, more liberally
the effects of a dry season
would not be so severely
felt by the ryot and was
then, the Government desired
to have the views of the
Collector, the Director of
Revenue Settlements &
the Board of Revenue placed
before them in greater detail
regarding
the question raised by the
Collector. Mr. Hordley has
responded & stated his views
fully in his letter received
in Board's Proceedings
13 March 1876 & 72 stated following
effect.
The tanks were originally

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The wells have become so important for irrigation purposes that during the last season when many of the tanks were quite empty, the wells were full & supplied a good deal of water for the entire adjacent cultivation in many places.

Harley has submitted an account showing the quantity of water in the tanks, the extent of the adjacent & total cultivated. The correctness of this account, although called in question by the Settlement Officer, is not in dispute. In some respects, must generally be admitted, as is visible in the letter headed in the later part of the proceedings. Harley has been by his own personal observation that many of the tanks were dry & that the wells helped materially to keep the cultivation going as usual. The wells have thus been the means of saving the season.

It is to be noted that the supply of water depends on the state of the tanks.

L.E. When the well is so near the tank, that its supply depends on the state of the tank.

from loss, but the right is however placed under great disadvantage in as much as he has to spend money in digging & working the well & is further called upon to pay water tax for the wet cultivation. In some cases, he may raise on dry land by means of his well & his second crop on one crop land from the same source. In Harley for these reasons recommends.

1. That the present limit of the tank land may be maintained, all wells beyond this limit should be allowed to irrigate wet or dry second crops on wet or dry land without payment of water rate or second crop assessment.

It is to be noted that the supply of water depends on the state of the tanks. Harley has been by his own personal observation that many of the tanks were dry & that the wells helped materially to keep the cultivation going as usual. The wells have thus been the means of saving the season.

2. That the revision of the present assessment of the tank land by the Settlement Officer should be stopped.

The Board of Revenue.

The collector's letter was sent -
 has submitted a detailed
 explanation on the points raised.
 He submits that the revenue
 of the agents is conducted
 in conformity with the rules
 sanctioned in 1837 June 9 1871
 1871; that compared with
 other days & other districts
 the most important & larger
 tanks are probably as efficient
 now or more so than formerly;
 that the system is not really a con-
 tinued method of levying the
 area of the agent is to be
 out by actual examination
 of the works & ^{reference to} ~~statement of~~
 accounts the ordinary capa-
 bility of the tanks in the past;
 that the accounts kept by him
 be incorrect in some cases cannot
 be a rule he so that they are
 not altogether relied on, as actual
 inspection of the tanks, previous
 any decision as to the agent's
 extent; the cultivation of the lands
 & the nature of the cultivation
 are generally determining
 how each tract should be treated.

Board, Panchayat
 1871 11/18 1871

Note
 This is a note to the Board
 of Panchayat, dated 11/18 1871,
 concerning the accounts of the
 agents of the tanks. The Board
 is requested to consider the
 accounts of the agents of the
 tanks, and to decide whether
 the accounts are correct or not.

Mr. Ramesh

Board's ruling is quoted below.
 "The Board are of opinion that
 the Basabundam lands
 referred to in para 17
 have rightly been classed
 as wet, & allowed a deduc-
 tion of one-fourth of the ad-
 assessment as compensation
 for the loss of raising the
 water."
 Mr. Banting is in favor of
 classing all land under
 "Doravoo" wells as well
 as under Itupash wells
 as wet & allowing a deduc-
 tion of one-fourth ad assess-
 ment for the cost of bailing. He says
 the latter, wells, which are
 situated within the pre-
 scribed distance of a foot
 work of irrigation there is no
 objection to this course. He says
 Mr. Banting nor his Deputy explain
 the terms "Doravoo" wells; but if, as the
 Board understand, these also are wells
 immediately deriving their water supply
 from a Govt. source of irrigation, the lands
 under them have been correctly classed as
 'wet', but if, on the other hand, they are not
 so situated, then, unless it is quite clear
 that they were constructed at the cost of the
 State, the lands cannot be classed as wet, nor
 is it just to charge any water rate on such
 lands, and it will be necessary to revise the
 statement in regard to them.

limits are that Mr. Banting
 does not confirm to his rules
 prescribed by him & confirmed
 by Govt. in their order of 5. 1871
 1873 as 45, & objects to his
 Table
 against as the settlement
 department would fix it;
 & advocates considerable
 reduction (see figures state-
 ment in para 9 of the District
 letter printed in B. P. 1871)
 1876 10/22/71; that the principle
 followed by the Settlement Dept. is
 to class lands irrigated
 from Government source of irrigation
 as wet, while Mr. Banting
 as a general rule objects to
 lands irrigated from
 Govt. source of irrigation, the lands
 under them have been correctly classed as
 'wet', but if, on the other hand, they are not
 so situated, then, unless it is quite clear
 that they were constructed at the cost of the
 State, the lands cannot be classed as wet, nor
 is it just to charge any water rate on such
 lands, and it will be necessary to revise the
 statement in regard to them.

water - rate & additional as-
sessment, he says, have been
levied on irrigated dryland
during recent years averaging
upwards of 3000 Rs a year
& he says it is large to suppose
that any considerable portion of
it can be paid voluntarily
for no consideration or irrigation
received -

On the subject of assessment
on lands mainly irrigated
by wells in wetland, Mr
Randall observes that
by G.O. 12 June 1872 No 928
a decision has already been
made to which no reference
has been made by Mr Justice,
& that subsequently when
it was attempted to show
that it was not fair to make
any charge at all for such
irrigation the G.O. was deemed
as follows: "The question whether
the rule that second crops to
be charged for when it is from water
obtained from private wells in wetland is
an important one involving a very large
amount of revenue in most of the districts.
It is an indisputable fact that such wells
are generally made, because their position

* one fourth of the highest rate
of assessment for wet lands
to be charged when second
crop is raised partly by irrigation
from private wells, as a
temporary arrangement
pending the introduction
of the revised settlement.

Mr Justice's proposals are in
accordance with the spirit
of the G.O. The settlement
Mr J. has apparently adopted
is a different one, possibly
the result of his principle in
cases decided by the Board
that all land supplied with
water should be liable to
assessment & charged for water

58
with regard to the tank assess-
ment a good supply of water, and that
it is almost impossible to determine
when there is a dispute, whether
the water for the second crop has
been drawn directly from the tank
by channels or indirectly by
means of the well. There may
be some cases of hardship, but
they must be few in number,
and the interests of the State
require that the rule should not
be relaxed."

The Board of Revenue disposes
of Mr Collector's proposals sum-
marily by saying that they
are opposed to the rules ap-
proved in G.O. 29 November 72
No 1628, & direct that the
Collector's reasons of assent
shall stand subject to any
modifications that may be
considered necessary or proper.
Here it will be well to
consider the provisions of the
rules as referred to.

broad principle land owner
therein is that the area
which governs an ordinary
supply with water shall
be considered as 'with' and
as 'out' as 'dry'. This rule
does not seem to meet the
difficulty that Mr. Horsley
refers to. He says that means
'dry' land is irrigated by
bank water to his deteri-
ment of his agent with
cultivation & the creation
of private wells has helped
to his indefinite extension
of his agent. The extension
of the principle above
enumerated cannot under
his circumstances
lead to a just determination
of his correct agent; & it
will in practice be found
impossible to enforce it
as much as it cannot
always be clearly demon-
strated that his irriga-
tion is from his ^{private} well or tank.

1881 March 15, 1881
1881 March 15, 1881

1881 March 15, 1881
1881 March 15, 1881
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1881 March 15, 1881
1881 March 15, 1881
1881 March 15, 1881
1881 March 15, 1881
1881 March 15, 1881
1881 March 15, 1881

rule is also open to question
Is a canal to be classed
with merely because it
derives irrigation from
government source? It is
quite possible that the
soil may be so poor that
natural standing water
alone, the wet crop
can be raised thereon.
It is manifestly hard
that such land should be
made to pay wet assess-
ment. This is exactly the
Horsley's contention (see
margin of para 11 of Mr. Horsley's
letter in P.T. No. 10246.) It
is brought out more fully
in Mr. Pettie's letter re-
corded in P.T. No. 10246/76.
The arguments advanced
seem entitled to much
consideration. The accepted
principle of land settlement
which is his half wet is
based on his estimation

outturn of produce which
 depends as much upon na-
 tural condition of soil as
 much as upon ar-
 tificial irrigation as.
 advantages possessed. Indeed.
 the principle is so far carried
 out where natural condi-
 tions alone suffice to maintain
 wet crops with a ^{with any degree of certainty} as on the west coast?
 it is invariably changed - &
 where irrigation is indis-
 pensable & the crops supplies
 it from his own means
 & his own industry, the
 government have always
 claimed only ^{the} dry season
 on wet crops & raised.
 This principle has been recently
 advocated by Mr. A. A. L. in a letter
 to the Govt. of India, & it is de-
 cided that if it is to be
 acted on, it should be stated
 distinctly for his guidance.
 The Board & the Settlement
 Dept.
 As regards the inter-
 ference of the Board in the
 revenue accounts, the Board
 has no right to interfere.

note
 It should be noted that the
 tendency of the revenue
 accounts by the Settlement
 Dept. is to increase them. The
 comparison of the revenue
 accounts of 1871-72 with
 the original accounts shows
 that there is an increase
 in the revenue accounts. In
 1871-72, the revenue was
 Rs. 27,000,000. In 1872-73,
 it was Rs. 28,000,000. This
 shows an increase of Rs. 1,000,000.
 The Board has no right to
 interfere with the revenue
 accounts.

The Board has no right to
 interfere with the revenue
 accounts.

by private wells in wet
 land, the Board in answer
 that the justice & fairness
 of the standing order on
 the subject are beyond
 question. The standing order
 quoted (under para 3 of the
 Board's order of 1st Sept. 1871) does
 not however apply to the
 cases cited by Mr. B. B. B.
 The wells referred to by
 the officer could scarcely
 have had the benefit of
 any surface drainage
 or percolation during the
 last season, when the
 tanks under which they
 were said to be situated
 were perfectly dry.
 They were full & supplied
 as much irrigation to the
 adjacent lands as the tanks
 if full would have done.
 It is beyond doubt
 that the wells are quite
 independent of the tanks & are
 supplied by the tanks.

a apart in the irrigation
 d system of the country, it
 c seems very fair that the
 c case entered as the
 a consideration claimed
 a further argument of the
 a feeble stone; & in sweeping
 the remarks of the Board have
 a no application to their
 case. A great deal must
 be left to the discretion
 of the Police and officers.
 a that hard & fast rule can
 be laid down. The policy
 of taxing well lands at such
 was condemned by the
 a of directors so early as 1852
 & their adjustment today
 a rates was ordered in 1860
 by No 1836 of 29 June 1869.
 a The suggestion of the large amount
 a as the 1,26,291 involved in
 a the measure did not prove
 a a deliverance to the surface.
 a much of the principle - the effect
 of this ^{of the assessment} policy, however, has
 a finally been neutralized by
 the Board's decision of the 1st

and the Board
 have decided
 that the Board
 should be

the Board's decision
 of the 1st

being directly or indirectly
 benefited by previous
 existing government
 work; & the ^{so-called} policy of imposing
 a fair & equitable assessment
 rate "on the lands irrigated
 by them.

Mr Randall's proposal
 for the future treatment
 of the lands is to charge
 $\frac{1}{4}$ assessment when crops
 are raised exclusively by
 the aid of a well or flow
 of $\frac{1}{2}$ assessment when
 is exclusively by ^{the aid of}
 or the chief is ^{the aid of} in
 the River. This is not only
 when the rate is not com-
 pounded, but which is

compounded; he proposes
 $\frac{1}{2}$ rate for lands in which the
~~supply is mainly dependent on~~
~~the aid of a well or flow~~
 upon wells or ^{the aid of} to ease of
 uncertain & partial supply from

12th Feb 1870
 For Services - The question is whether
 it is sufficient consideration
 for the labor & the cost involved
 in the working of the

Case of partial cleft

Case of partial asphyxia

(continued)

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

Sufficiently correct results -

The system pursued consists in an examination of the accounts of actual cultivation during a series of years and of personal inspection of the land by the visiting Officer.

~~I think~~ that in the case of Cuddapah the Board have done all that is necessary in approving the suggestion of Mr. Rendall, that the Board instruct the Deputy Director to "restrict the revision of tank accounts to the area that may be irrigated in ordinary years and to eliminate all doubtful cases; where the land may not when cultivated, invariably be under irrigation."

The case of 'wells' is somewhat more difficult. It is very undesirable to do anything which will check private enterprise so useful as

That if cases should arise when it is manifest that a well dug at a ryot's expense has drawn away water from a previously existing ~~spot~~ work, in such instance it such well land shall not be wholly exempted from apportionment, but a fair & equitable extra cess water rate may be imposed.

Those desiring supply from surface flow are simply taking a certain amount of irrigating water for the benefit of a particular plot. It is the prejudice probably of other land holders that they in no sense may additional water to aid their crops - & so the water is withheld according to the

63
the wells which it would seem largely supplement the insufficient supply of the Tanks in Cuddapah. But I hesitate to reverse a principle which has long been accepted by Govt. & with which the people are familiar. ~~and~~ It is embodied in the Board's rule -

If this principle is admitted it can hardly be denied that wells dug in wet lands are liable to some extent cess - for as the Board remark many of them derive their supply from surface flow from the work which irrigates their site, whilst it may be ascertained of all that they are fed from the same source by percolation.

The case of these wells stands on a different footing from

wells on Dry Land, inasmuch as they are not expensive in construction and water is found with ease.

There is also the difficulty that it is almost impossible to decide whether the water for a second crop has been drawn from the tank by channels or indirectly by means of wells.

The information of the cost involved in Mr. Hore's proposals may with advantage be obtained. The Board say the loss involved will be enormous.

It must also be borne in mind that it may be difficult to withhold the same indulgence from other districts in which the practice of "wet wells" as they are called prevails.

Chengalpet 27/6/1906
20-26-6-77-10-2115
wet wells in (undrained)

Wells fed by percolation. i.e. wells where water in the soil or lower strata to the depth of surface to aid the crop & supplement - got water appear to me to be equally suitable for exemption from wet - exemption ~~and~~ collection of water percolates from a got tank by sub filtration or by rains from the surface.

The principle in all countries I believe is that there is no property in subterranean water - but that it belongs to the soil in which it is found -

The information required would be supplied

By 27/6

Board Proceedings 2/12/1906
2-12-1906 No. 22461.

In this paper, the question of the treatment of lands irrigated by wells constructed to be managed by private individuals in wet lands in Cuddapah is fully discussed -

Historical aspect of the proposal to permit this method of irrigation in order to save the subject from the first is a comprehensive discussion from under one description.

But I would make the order very strict. By the first & last Paras I add that the season of drought thro' which or in losing a title & land & consideration & the question of a new & the

The Govt. observe that in pursuance of the policy of the Government of India to encourage the growth of private enterprise, a revenue of Rs. 124,291 was relinquished by Govt. in 1869 in favour of his honour, gold private wells, & the

under No. 1036 of 29 June 1869 124,291 was relinquished by Govt. in 1869 in favour of his honour, gold private wells, & the

25/10/1906 15:15 R 24/10/1906

for ~~Canada~~ ¹ ~~preparation~~ ^{sup.}
 plied by wells sunk in. NOT to lose sight of
dry land & founded by His Grace's suggestion
 are situated at a greater ^{as to the legal right}
 distance than 10 yards. ^{to subsoil water-}
 I personally do not re-
 commend the wells.

Quadrant his exception
indulgence was ^{also} granted

instead of half of the highest

from private walls, as a

given census Settlement
the census case collection

that the cost was ⁱⁿ some
treated more liberally.

10/5 June 1902

16/24

Ray Sp. 5837, 1907

100

The Director of Rev. Sec.
of Public

a circumnavigating the

...the name of ...

innocent - Her part

the force of his objection

caused, must not

consider that the import-
ant part which private
will play in securing
drugs & the help they
afford both to the Govt
& the for: in securing
the former his crop & the
latter their revenue,
entitled them to more
favourable treatment
than has yet been ac-
corded. He observes
however that the
whole subject is under
investigation by the
British India Office
Proceedings of 12 Jan'y
1877 no 24. of 15 Jan'y
1877 no 157 & and
accordingly request that
the points be submitted
for decision on the above.

60
The person may be again
brought up with
the report is now awaiting
from Colonel 7 & that
at the same time the
cost involved in the
proposed proposals
may be specifically
reported.

Mr. Borely's remarks
regarding income ex-
tensions of agents
will doubtless re-
ceive attention in
our future
operations connected
with the revision of
agents of tanks, as
now conducted under
the order of the Dept.

7.5.77.

Proceedings of the Madras Government
Under date the 26 June 1877.

Read the following
Proceedings of the Board
of Revenue.

Submitting review of Board
and Director of Revenue Settlement
regarding cultivation received by
means of Wells in wet lands in
Cuddapah District, and recommend-
ing acceptance of Mr. Rundall's
proposals in regard to compensation
for second crop charges.

(Pl. E. 1st Sept/76, N^o 2246)

Sub^d with Board's views,
further report from Director of
Revenue Settlement on subject of
Revision of tank payments and
treatment of irrigated lands
by wells in Bardhaman District

($n = 4^2$ " " $N = 2269$)

In these papers
the question of the treatment
of lands irrigated by wells
constructed, and maintained
by

lay private individuals in
secret lands in Budapest is
fully discussed.

2. His Grace the Governor
in Council observes that the
whole subject is under in-
vestigation by the Board
(G.O. 15th January 1877 N^o 157A)
and he therefore resolves
to request that the points
submitted for decision in
the papers recorded above
may be brought up with
the reports now expected
from collectors, and that at
the same time the cost
involved in Mr. Horsley's
proposals may be specifi-
cally reported.

The

3. The character of the
present season brings into
special prominence the
necessity of a careful
consideration of this
important subject.

4. The Board will
at the same time state
their views upon any
aspect of the question —
which does not seem
ever to have attracted a
attention viz. The legal
right of Government to
sub-soil water as distin-
guished from surface-
flow. It is understood
that the principle in most
countries

countries is that there
is no separate property
in subterranean water
but that it belongs to the
soil in which it is found
whether it percolates from
a Government's source by
subfiltration or is brought
to the surface from the
lower strata.

CU

14 To H. of Commerce 10.7.77 in 27 Dec.
15 To H. of Commerce (the same)
21 To P. W. Dept.
5 To Financial Dept.

Handwritten text in the top left corner, possibly a title or header, including the words "Handwritten" and "by the contract a" followed by several lines of illegible cursive script.

Handwritten word "rest" in the bottom left corner.