

(1) Number of Pages 44 Sheets.
(2) Date of repair 7-6-68
(3) Initials of the Referencer [Signature]

MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No.	1322	Press
B.P. No.		Mis.
Dated	22. 9 -	1876 196 .

9/11

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
22nd September 1876.*

No. 237. Read the following Proceedings of the Board of Revenue, dated 12th September 1876, No. 2,326 :—

Read again Board's Proceedings, dated 20th October 1875, Mis. No. 9,483.

Read the following replies the above :—

Letter from Collector of Cuddapah,	dated 27th October 1875,	No. 219.
" " of North Arcot, "	8th November, "	591.
" " of South Arcot, "	27th October, "	454.
" " of Madura, "	28th January 1876, "	34.
" " of Salem, "	22nd June, "	139.

Read also Board's Proceedings, dated 16th March 1876, Miscellaneous No. 2,308.

Read the following replies the above :—

Read letter from Collector of Ganjam,	dated 29th May 1876,	No. 1,507.
" " of Vizagapatam, "	17th, "	776.
" " of Godavery, "	25th July, "	220.
" " of Kistna, "	21st, "	1,240.
" " of Nellore, "	28th April, "	1,099.
" " of Bellary, "	23rd May, "	162.
" " of Cuddapah, "	2nd, "	108.
" " of Kurnool, "	30th, "	239.
" " of Chingleput, "	24th, "	311.
" " of North Arcot, "	21st March, "	128.
" " of South Arcot, "	28th July, "	335.
" " of Tanjore, "	21st June, "	2,306.
" " of Trichinopoly, "	8th August, "	207.
" " of Madura, "	27th March, "	127.
" " of Tinnevely, "	23rd June, "	399.
" " of Coimbatore, "	25th March, "	74.
" " of Salem, "	26th July, "	180.

THE Government having in their Order, dated 1st July 1875, No. 1,831, Public Works Department, directed the issue of a notice requiring the clearance without fail of all calingulahs of tanks at least a fortnight before the usual date of the setting in of the periodical rains under pain of forfeiture of all claim to remission wherever the duty may be neglected, the Board's Circular Order, No. XIX. of 1875, was promulgated. Subsequently the Government in their Order, dated 25th August 1875, No. 2,433, Public Works Department, called for a report on the way in which sanctioned rules regarding the management of tank calingulahs are to be enforced and the effect of the measures proposed, whilst in G.O., dated 10th March 1876, No. 359, Revenue Department, the Board were directed to enquire and report whether the observance of the foregoing Circular Order has not operated to the prejudice of the ryots and Government owing to the insufficiency of the last north-east monsoon. The letters read above are the replies of the Collectors consulted to the two references, and as the subjects are intimately connected, they may be considered together.

2. As regards the question whether the order has operated prejudicially to the ryots and Government, the general tenor of the replies is to the effect that no loss has

*Proceedings of the Madras Government, Revenue Department,
22nd September 1876.*

resulted, but that this was owing to the deficient rain-fall, in consequence of which the tanks never overflowed the crest of the calingulahs. In Nellore and Tinnevely some loss has been attributed to the enforcement of the rule regarding the clearance of calingulahs, but no reliance is to be placed on the estimates. The Collector of Madura on the other hand reports that the effect of the order, so far as it was observed, was beneficial, as it probably prevented some tanks being breached by the violent rains which occurred in October. The Collectors of Chingleput and South Arcot remark that the fact that no loss resulted was due to the deficiency of the rain-fall, and that the enforcement of the order will lead to much loss of revenue in ordinary years, owing to the crests of the calingulahs being in the majority of cases much too low. Mr. Garstin is of opinion that the application of the order should be confined to cases in which the calingulahs are of a height corresponding to full tank level, and expresses his belief that in all other cases calingulahs may be bunded up with turf to that level with perfect safety all the year round. Mr. Stuart thinks the order has been but little acted upon, being difficult to enforce all over the country, and is satisfied that a rigid enforcement would lead to very serious loss. He points out that it not unfrequently happens that the first burst of the monsoon is the only really good fall in the season, and that if the calingulahs are opened, the tanks will not afterwards fill. He considers that the matter may be left to the villagers and village officers, who are on the spot, are deeply interested in the safety of the works, and know all the local peculiarities which render it safe in some cases to keep calingulahs closed, and in others to open them partially or only when the tank is in actual danger.

3. The reference in regard to the manner in which sanctioned rules respecting the management of tank calingulahs are to be enforced arose from the expression of doubts by the Chief Engineer for Irrigation as to whether the law relating to "mischief" was not applicable to the case of villagers transgressing rules for the preservation of works of irrigation. The question was referred for the opinion of the Collectors of North Arcot, Salem, Cuddapah, South Arcot and Madura. Mr. Horsley states that he has directed that calingulahs and waste weirs are not to be touched by any one except a Public Works Department Officer, a rule which is capable of enforcement and nobody can mistake. Mr. Whiteside considers that, although transgression of the rules does not bring the case within the definition of mischief, the villagers might be punished under Section 188 of the Indian Penal Code, if a notice forbidding the bunding of calingulahs were promulgated in the villages and served on the village headmen. He considers departmental punishment of the village officers and withholding of remissions sufficient inducements to secure the observance of the regulations. The Board cannot concur with Mr. Whiteside in considering the section quoted by him applicable. The disobedience to which that provision of the law applies must be such as causes or tends to cause obstruction, annoyance, or injury, or risk of obstruction, annoyance, or injury, to any person lawfully employed, and the omission to clear the bund of a calingulah can scarcely be said to tend directly to any of these results. Mr. Garstin conceives that the only way of enforcing the orders in the absence of a special law is by punishing the Monigars and withholding remissions, and considers that the proper safeguard is the substitution of self-regulating flush escapes, after which any person erecting a dam on a calingulah would clearly be endangering the safety of the tank, and could be dealt with penally. Mr. Bliss deals with the question in connection with the subject of "kudimaramut," and considers that a remedy is to be sought in some measure which

*Proceedings of the Madras Government, Revenue Department,
22nd September 1876.*

will make the whole body of the villagers, and not the village officers only, responsible. He advocates special legislation for the purpose of making it obligatory on the ryots to perform all earthwork repairs to minor works of irrigation, with the intention, it is presumed, so far as the present question is concerned, of increasing their stake in the safety of the tank and rendering them more careful. The Board have already dealt

with Mr. Bliss' proposals in separate*
Proceedings. Mr. Longley considers that

the head of the village must be held responsible, and that Nirganties should be entertained to assist him. Schemes for the revision of village establishments are under preparation in Salem, and the requisite provision can be made wherever necessary and funds suffice.

4. It is clear that the present rule, if strictly enforced, will entail considerable loss on both the ryots and Government, and the Board are of opinion that the bunding of calingulahs with loose earth or other material easily washed away by a rush of water must be recognized to a certain extent. It is admitted that the crest level of the calingulahs might, with safety, be raised in most cases, and if this were done, the order regarding clearance might and should be strictly enforced, but any measure of this nature must be a work of time, and there is no immediate prospect of the remedy being applied. The Board, therefore, adhere to the views expressed in their letter recorded in G.O., dated 9th July 1873, No. 1,766. Theoretically the Engineer officers are doubtless right in holding that there is a risk in restricting the escape of water from tanks at the commencement of the monsoon when the fall of rain may be expected to be heaviest, but it may be said without disparagement that the Engineers' and ryots' stand-points are essentially different. The former regards an irrigation work mainly from a professional point of view, his chief object being to preserve the tank from injury, and avert all risk of its bursting. The ryots' attention on the other hand is more concentrated on the prospects of his harvest. He knows by dearly-bought experience, that unless the level of the water is kept above the crest of the calingulah, there will not be a sufficient supply to mature his crop, that in most seasons the tank will not overflow its calingulah more than once in the year, and that if he is to take any steps for the storage of water at all, he must do so from the commencement of the season. The order directing the clearance of calingulahs by the 1st October, and prohibiting their being closed until the first burst of the monsoon is over, virtually precludes the storage of a full tank supply, as it rarely happens that there is any discharge after the burst is over.

5. The ryot must, therefore, disobey the orders of Government or consent to risk the loss of his crop; he prefers to risk the displeasure of the authorities to the loss of his paddy, and does surreptitiously, what he dare not do openly. The calingulah is stuffed as tight as possible and left to itself, whereas if the practice were recognized, the calingulahs would be carefully watched and opened whenever danger threatened. As regards all ordinary tanks not forming links in a connected chain and not in a position to endanger lines of rail, the Board think permission might be accorded to the ryots to raise calingulahs on condition that the tanks should be carefully watched by the Nirganties and others day and night during the setting in of the monsoon and in rainy and stormy weather, and that no remission would be given in the event of a tank bursting owing to neglect of precautions on the part of the villagers generally. The ryots have a keen sense of their own interests, and the

*Proceedings of the Madras Government, Revenue Department,
22nd September 1876.*

bursting of a tank is a far more serious loss to them than to the State; they may be trusted, therefore, to look after their own interests. More stringent rules are doubtless required when other interests are at stake, as for instance where tanks are in dangerous proximity to lines of rail or where they form portions of a long series extending over several villages; in such cases there is more than one set of interests involved, and clearance must be insisted upon unless close watching can be ensured. It should also be provided that all calingulahs should be cleared at least once a year, as the risk is increased by allowing the bunds to stand year after year until they become hardened to such an extent that water will not readily wash them away.

6. On these grounds, the Board consider that there will be less risk in trusting to the ryots, than in endeavoring to force them to abstain from a practice which experience has shown to be beneficial to their interests. The village officers must be held responsible for seeing that such rules as may eventually be decided upon are duly carried out, the ryots being subjected to loss of remission when injury results through their neglect. The provisions of the Penal Code relating to "mischief" are in the Board's opinion inapplicable to any infringement of the rules prohibiting bunding of calingulahs or enjoining clearance before a certain date, as the knowledge that "wrongful loss" is likely to ensue from any such act or omission, which is an essential element of the offence, cannot fairly be presumed in the present state of tank calingulahs, it being an admitted fact that with proper precautions dams may be erected with perfect safety. Special legislation must, therefore, be resorted to if penal consequences are to attach to any act or omission in contravention of the rules, but the Board would deprecate any such measure.

(True Extract.)

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

No. 238.

ORDER THEREON, 22nd September 1876, No. 1,322.

Irrigation, No. 4.

THE Government agree with the Board in the view expressed by them in paragraphs 5 and 6 of their Proceedings. The order issued in the Public Works Department is doubtless calculated to ensure fully the safety of the tanks by directing the clearance of the calingulahs on the monsoon setting in; but experience has clearly shown that the strict enforcement of the order leads to wastage of water which should be stored for cultivation, and it often results in loss of crops to the ryot and of revenue to the Government. In practice, the rule is violated with impunity in many cases; the state of the law not admitting of prosecution in such instances. It is clearly inexpedient to have recourse to special legislation on the subject, and the Government resolve to adopt the proposal of the Board to take advantage of the interest which the ryot himself possesses in the irrigation works, and throw on him the onus of keeping them in safety, the village officers and the Nirgunties being directly responsible to Government; and the co-operation of the ryots being secured by withholding remissions, as proposed.

2. In the case of certain works, such as chains of tanks, tanks adjoining road, and lines of rail, special precautions are doubtless necessary. In such cases, the enforce-

*Proceedings of the Madras Government, Revenue Department,
22nd September 1876.*

ment of the rule laid down in the Public Works Department under certain limitations and reservations will be found useful. The Board will issue the necessary instructions on the subject.

(True Extract.)

(Signed) D. F. CARMICHAEL,
Secretary to Government.

To the Board of Revenue.
" the Public Works Department.

Ed. F. R. Bantleman.

152
4

From W. D. HORSLEY, Esq., Collector of Cuddapah, to the Secretary to the Board of Revenue,
dated Bramhanayerragudi, 27th October 1875, No. 219:—

In reference to foot-note of the Board's Miscellaneous No. 9,483, dated October 20th, to
G.O., Public Works Department, No. 2,433,
dated August 25th, I have the honor to state that
I am not aware that there are any sanctioned
rules for the management of tank calingulabs in this district.

2. As I informed the Board in my letter* which appears in Board's Proceedings, No. 2,557,
dated 13th September 1875, I have directed in
this district that calingulabs and waste weirs are

* Dated 26th August 1875, No. 179.

not to be touched by any one except a Public Works Department Officer. This is a rule which no
body can mistake, and is the only rule which, I believe, can be enforced. When this order is
infringed, the Reddies should be punished by dismissal from their posts and emoluments or suspend-
ed. If the result of disobedience should be the breaching of a tank, no remission should be granted
for crops washed away, or which have withered from want of water. The effect of the measure
proposed will, I hope, be that tanks will not burst after a heavy fall of rain.

Ed. W. J. Lewis.

Boht. of 1876: 31x10x13.

REVENUE.

2.

THE BOARD OF REVENUE.

to, do, do.

Dated September, 2nd.

Recd.

Recd.

G.O., 28th September 1876, No. 1932.

SEPTEMBER.

Nos. 237-238.

Calingulabs of Government Tanks.—Passing
orders on Proceedings of the Board of Revenue
regarding operation of Circular Order requiring
clearance of — before the monsoon, and the
manner in which sanctioned Rules for the manage-
ment of the calingulabs are to be enforced.



192/5

From W. S. WHITESIDE, Esq., Collector of North Arcot, to the Secretary to the Board of Revenue, dated Palmanair, 8th November 1875, No. 591.

With reference to Board's Proceedings, Miscellaneous No. 9,483, dated 20th October last, calling for report on the subject of paragraph 3 of G.O., Public Works Department, dated 25th August last, I have the honor to state that, although no offence of mischief as provided for in the Indian Penal Code can be brought home to villagers who omit to clear and open out the calingulahs prior to the setting in of the periodical rains under the existing orders of Government as observed by Colonel Moberly, still I am of opinion that if a carefully worded notice on the subject, duly published in the local gazettes, promulgated in the villages, and actually served upon the village headmen as representatives of their respective villages, they can, in case of disobedience, be successfully prosecuted under Section 188 of the Indian Penal Code. The heads of villages may, however, plead their individual irresponsibility, except in their official capacity, for the non-fulfilment of the terms of the notice by the entire village community. In that case, I would not exonerate them from liability to punishment unless they satisfy me that *they* really did do their duty by calling upon the village community to aid them with the required labor by actually visiting the calingulah, and by reporting to the Tahsildar at the time that they were using their best endeavours to remove the obstructions and to allow the free discharge of surplus water. If they could prove this, they would not, of course, be prosecuted, and the recusant villagers would be proceeded against for the recovery of the penal rates under Section 6, Act I. of 1858. I may add that, under any circumstances, if the calingulahs are not cleared out according to published orders, the village officers can be departmentally punished by suspensions and dismissals from their *Merassi* offices, which is considered by them a more severe punishment than fines, &c., imposed under the penal laws. This course has always been pursued with success in this district. Further, the withholding of remissions under such tanks is also a severe punishment to the villagers.

Etd. W. J. Lewis

1322
7

From H. W. BLISS, Esq., Acting Collector of Madura, to the Acting Secretary to the Board of Revenue, dated 28th January 1876, No. 34.

I HAVE the honor to submit the reports called for in the Board's Proceedings, Miscellaneous Nos. 8,521 and 9,483, dated 18th September and 20th October 1875, respectively, the subjects of which are so related that they may conveniently be disposed of together.

2. The first question referred for report is the expediency of legislation to compel the due execution of "Kudimaramut" and the form such legislation should take; the second, the measures to be adopted for the enforcement of the sanctioned rules for the management of tank calingulas and the effect of the measures proposed.

3. These latter words ("the effect of the measures proposed") I do not quite understand. I do not see that there can be any "effect" if proper measures are sanctioned and enforced, but that the rules will be more strictly obeyed than heretofore; but I do not believe that absolute compliance with such rules can be expected so long as the measures to be taken to enforce them tend only in the direction of the punishment of the village officials who may be considered to have countenanced or permitted or not to have prevented breaches of them.

4. The truth is that our superior establishments, both Revenue and Public Works, are far too weak in numbers and far too overburdened with work for it to be possible to make any constant and systematic inspection of irrigation works with the view of ascertaining whether such rules as those for the management of tank (and channel) calingulas are observed. Occasionally in going about one finds a calingula improperly stopped up. One can have it cleared and can punish the head of the village, who, if the village happens to be a large one and the tank far from his house, very likely knows nothing about the matter. But the moment one turns one's back, the calingula is blocked up again, and it is impossible to prove who did it.

5. Just such a case actually happened to me the other day. The Assistant Engineer, South Indian Railway, reported to me that a tank was so full as to endanger the railway, and that there was a threatening of violence when he attempted to clear the calingula so as to lower the water level. I got an engine and two or three goods-vans and went out, taking with me the Superintendent of Police and a few constables in case of resistance. The District Engineer also accompanied me. We found the calingula of the tank blocked up to the height of nearly 3 feet and the water almost up to the ballast on the top of the railway bank. I had the stuffing completely cleared away and went back to Madura, leaving the calingula open for the water to run down to the level of its crest. Next day the stuffing had been replaced no one knows by whom, and the water was nearly as high as before. I sent for the Nattamgar and found that he was an acting man living in a village on the other side of the Vigay, which at the time was in fresh and not easily, if at all, fordable for several miles. Very likely he knew nothing about the calingula being blocked up, but as it was useless to have a Nattamgar on the other side of the river from his village, I dispensed with his services. As it happened no harm was done by the blocking up of the calingula, and there the matter ended.

6. But the result might have been very different. The bund was a weak one, as I am sorry to say the bunds of most tanks in the Madura Taluq are and must be until the nature of the soil of which they are made is altered, and it was deeply cut across in several places by cattle tracks. Suppose it had breached, as the District Engineer was of opinion it was likely to do, unless the stuffing of the calingula was removed, not only would the cultivation under it have been lost and a large expenditure required for repairs, but a good-sized railway bridge and a considerable length of the railway embankment would probably have been carried away, at what inconvenience to the public and loss to the Railway Company I need hardly point out. The ryots might have been refused remission, but it is obvious that this would in such a case be a most inadequate penalty.

7. And this brings me to the point at which I think it will be seen to be necessary to take the two questions now under report as one, and to apply a common remedy to evils which have a common origin. The whole difficulty as to the enforcement of the rules for the management of tank calingulas and as to the non-observance by the people of their ancient obligations

132/6

to make the petty repairs to their irrigation works from time to time required arises, I think, from the following causes: their indolence, their short-sighted and selfish indifference to the feelings and interests and wishes of others, and their proneness to faction and consequent inability to combine. A remedy must, I think, be sought in some measure which will make the whole body of the ryots, and not the village officers only, responsible for the full results of their negligence and disobedience.

8. The only way that this can be effected is, I think, by legislation, and that original and not an amendment of the existing law which has notoriously proved a failure.

9. The question of the advisability of a resort to legislation, either to compel the performance by the ryots of their *Kudimaramut* obligations or to commute them into a money payment or cess additional to the *tirvai* they pay on their lands, has been under discussion from time to time for the last eight or nine years. I remember reporting on the subject in 1868, and again in 1869, when the last Public Works Commission was sitting. On both occasions, I said that I thought that legislation was necessary and sketched the sort of Act that I thought was required. There was a good deal that was crude in my reports, and many assertions of a more sweeping character than I should be inclined to make now. But after thinking the subject over more or less at different times in the interval and carefully considering it now, I still adhere to my original scheme, and hope that it may meet with more acceptance now than it did then.

10. As the Board will no doubt remember there were endless discussions as to tank repairs at the time of the last Public Works Commission. The principal questions considered for it was generally admitted that *Kudimaramut* should be enforced in one shape or another, were—Should *Kudimaramut* be replaced by a cess; and how should irrigation works be classified with reference to the sources from which it was proposed that their upkeep should be provided for?

11. The proposal to levy a general cess in lieu of *Kudimaramut* was almost universally condemned and is not likely to be revived, and the idea of a cess additional thereto did not meet with much favor.

12. The question of classification found no place in the report of the Commission or in the Draft Act for enforcing the obligation of *Kudimaramut* which they prepared. It is of course of the first importance, if *Kudimaramut* is to be strictly enforced, that the objects to which it should be applied should first be ascertained and authoritatively prescribed. This it was evidently, judging from the tenor of the questions which were circulated, at one time intended to do. But the intention seems to have been given up, for in the Draft Act, framed by the Commissioners it is proposed that—"II. The Board of Revenue shall authorize Collectors to ascertain for each village by careful local investigation the description and extent of work, which under the designation of *Kudimaramut*, or *Umji Satha*, or other name, it is incumbent on ryots or village communities by recognized local custom to perform in the case of irrigation and drainage works, and how the required labor for the purpose is apportioned and fixed." Instead of the enactment, therefore, of some broad and simple rule applicable to irrigation works generally, the circumstances of individual cases were left to be ascertained on local inquiry.

13. Had this proposal ever become law, numerous difficulties would, I fear, have prevented its being effectively carried out. Its very vastness and the multitude of detailed investigations it would have required would alone probably have proved fatal to it, even if it was possible that evidence could have been forthcoming upon which the facts with relation to each irrigation work could have been ascertained in any but the most summary and perfunctory, and therefore possibly inequitable, manner. But unfortunately there was and is hardly a possibility that the most careful research would disclose any such evidence. *Kudimaramut* rules have been simply a dead letter, at all events ever since I joined the service, and probably for long before. At least, I never yet saw any signs of their practical existence. They may be theoretically in force, but it is but seldom that obedience to them is insisted on. With disuse people have forgotten all about them; and no amount of inquiry would, even in 1870, much less six years later, await to ascertain the details of a former custom, which from a discontinuance so long as to lead to forgetfulness has now ceased to deserve the name.

14. But as I said above the first intention seems to have been different, and to have tended in the direction of a general classification of works, as Imperial, Local, and Village; the first to be maintained wholly by the State; the second either in the same way or jointly by the State and the occupants of irrigated lands; and the third entirely by the villagers. Another obvious and a simpler classification was as Imperial and Village (or Local), corresponding to the above, but with the omission of the intermediate class. Why the subject was not carried further, and why the proposal of the Commission took the shape above discussed, the papers to which I have had access afford me no clue. It may be that it was thought that the decision of the question to which of these classes each irrigation work should belong would involve greater difficulties than the advantage to be gained would make it worthwhile to attempt to overcome. Difficulties no doubt there would have been, though far less, I think, than in the execution of the plan proposed by the Commissioners.

15. But in the plan I proposed then, and now beg to submit again with such alterations as are rendered necessary by the abandonment of all proposals for the levy of a cess for the repair of irrigation works, I venture to submit that there are no difficulties of classification whatever. The briefest inspection would in most cases suffice to determine the class of every work without possibility of error.

16. It was to classify repairs rather than irrigation works, and to classify them as,

(1),—Masonry, to be executed by the Public Works Department from Imperial Funds; and,

(2),—Earthworks, to be sub-divided into,

(1),—Imperial, to be executed as masonry but paid for by a cess *extra* to *Kudimaramut*; and,

(2),—Local, to be executed by the people who would in each case choose for themselves whether they would contribute in money or in labor.

17. But as it is not now proposed to levy any such cess as was before contemplated, this classification may be still further simplified, and repairs be classed as,

(1),—Masonry, to be executed from Imperial funds; and,

(2),—Earthwork, to be executed by ryots; with the proviso that *Kudimaramut* shall only be required on such irrigation works, principal or supplementary, as irrigate the lands of a single village or one compact block of cultivated fields not exceeding, say, 2,500 Acres in area, and shall not be required on any irrigation channel the length of which exceeds, say, five miles.

18. The effect of such a rule would be that all irrigation works would be divided into—

1st.—Major Works, such as great tanks watering several square miles of country and the great irrigation canals of the Godavery, Kistna, and other districts which extend for many miles, and which have numerous branches irrigating tens or it may be hundreds of villages.

2ndly.—Minor Works, such as the smaller tanks and the channels and branch channels leading to villages and fields from the larger tanks and from the main irrigation canals.

19. To the former class, or Major Works, *Kudimaramut* is so clearly inapplicable that it would be waste of time to state why it is so.

20. In every case, masonry is too important a matter to be left in unprofessional hands. I would, therefore, have all masonry, whether to Major or Minor Irrigation Works, executed by the Public Works Department from Imperial Funds.

21. But I think that the holders of irrigated lands might properly be required to perform all earthwork repairs without exception to the Minor Works which supply their lands with water; and my belief is that this simple rule would result in an equitable division of the cost of the upkeep of such works between the Government and the ryots.

22. I am quite aware that if the estimates for the repair of such Minor Works which have been carried out during the last few years were scrutinized, it would be found that by far the larger portion of the expenditure has been on earthwork; and that it may thence be argued that to throw the whole cost of the earthwork repairs on the ryots and to charge Government only with the cost of the masonry repairs would be a very inequitable division of the total cost of the repairs required and executed.

23. But if this view is maintained, it can, I venture to think, only be from a failure to appreciate the causes and the nature of the deterioration of irrigation works which leads to the

necessity of the execution of earthwork repairs at the cost of the State. The clearance of silt from minor channels it is admitted the cultivators should attend to. Silt is not deposited all at once but gradually, a little with each fresh; and the labor of clearing it away is but slight if the work is regularly and systematically attended to from time to time as the need for it arises. It is the same with the repair of tank and channel banks. Cattle tracks over them and gullies worn by the rain do not in a day, or a month, or perhaps even in a year, cut so deeply into them as to endanger the safety of the work. Ultimately no doubt they must do, and it is exceptional when a tank which is provided with an adequate escape breaches from any other cause. When a breach actually occurs it is perhaps 30 or 40 feet deep and as many yards wide, and a very considerable expenditure and more labor perhaps than the village itself can supply are required to close it. But up to the very day, very probably, before it occurred, a few men in a few hours could have filled up the cattle track or gully in the bank the low level of which allowed the water to top it and to cut it away; and if any officer of competent authority of either the Revenue or Public Works Department happens to be on the spot *Kudimaramut* may in the particular instance be enforced and the tank or channel made safe. But in the absence of any such officer what is everybody's business is nobody's business. Each individual ryot thinks that he will take the chance of what may happen rather than take on himself the whole burden of even a petty repair which he knows his neighbours should share with him, but which he is powerless to compel them to join in. He remains *#ibm* therefore, a performance at which natives generally are very apt, and the tank breaches and Government has to spend a large sum to repair it. In other words, it is solely the neglect of *Kudimaramut* that in the great majority of cases ever renders necessary those more extensive earthwork repairs which are not now understood to come under that head.

24. There are, of course, special cases to which my description does not apply, and in which Government might properly relieve the ryots of the whole or a part of the cost of repairs; but I think most people who have considered the subject and have experience in it will agree as to its general accuracy, and in the conclusion which I deduce from it. If so, I submit that it will not be an inequitable division of cost and labor to make the holders of irrigated land solely responsible for the earthwork, and to provide from the public funds only for the masonry repairs of all minor irrigation works (as above defined).

25. The means I would adopt to carry my conclusions into effect would be briefly as follows.

26. I would pass an Act empowering Government to require the occupants of the land watered from any minor irrigation work (as above defined) to keep the earthwork thereof in repair and to provide all labor required for earthwork in connection with masonry works (e.g., the cutting down a bank to get at and examine or repair a sluice), upon the Collector and the District Engineer certifying that the work was then in good order and provided with a proper escape and not likely to require repairs other than *Kudimaramut* for, say, twelve months; and I would enforce compliance with this requirement by provisions that the occupants of the land watered by the work should be entitled to no remission for loss of cultivation on account of deficiency of water due to their neglect to comply with it; that they should be responsible to other parties for all damages resulting from such neglect; and that in case of their refusal or neglect to carry out from time to time such repairs as the Collector might require them to make and within a time fixed by him, he should be empowered to have them carried out by the Public Works Department from funds to be advanced from the Public Treasury, and to be recovered from them by a cess additional to the amount of their puttas.

27. Other provisions would, of course, be required for the apportionment of the cess, for the settlement and collection of damages sustained by other persons in consequence of refusal or neglect to comply with the above rules; and for enabling the landholders to arrange among themselves for the contribution of individual shares of the cost of repairs in money or in labor. But into such details it is not now necessary to enter.

28. Should these suggestions be approved and be followed by legislation of the kind, I recommend it would not at once be possible to extend the Act to very many irrigation works. Only those which are at the time in really good order would be brought under it. But as time went on and the Public Works Department was every year relieved from future care (otherwise than in the way of inspection) of the works they had put into good order in the past year, the effect on the working of the department and on the finances of the State should be very great. The officers of the department would have far more time on their hands for the investigation of new projects, a work urgently required and hitherto quite neglected in this districts, and funds would become available for the almost numberless petty new works in the shape of proper culingulas and sluices which our tanks and channels now require.

29. Difficulty, of course, there would at first be in working such an Act as I propose, but I do not think that it would be very great. Unaccustomed as natives are to combination for the common good, I have no doubt that at first they would ignore the Act and leave works handed over to them to deteriorate as heretofore. But with a proper system of inspection on the part of the officers of the Public Works Department, deterioration should not proceed far before a notice from the Collector would reach the village that such and such repairs according to an estimate appended were considered necessary, and that the landholders were required to do the work within so many weeks or months. In many cases such a notice would once be disregarded; but when the landholders found that the result of their neglect to obey it was the entry upon the work of the agents and workmen of the Public Works Department, for whose labors they had to pay after the work was finished about double as much as they could have done the work for themselves, I should be much surprised if a second notice to them or a first notice to any of their neighbours did not meet with prompt obedience.

30. The measures I recommend are of a sweeping character, but I believe they would be effectual for the objects for which they are designed, and on which Government and the Board have called for report. I know of no less extensive alteration in the existing want of system from which the same results could be expected or even hoped for on any substantial grounds.

31. It may, however, be that others will not agree with me, and that it may be determined to confine *Kudimaramut*, as it may be defined and enforced by legislation, to more partial and petty repairs than, I think, may fairly be required from the ryots. If so, there is one point I wish to draw attention to. This is the amount of the repairs for which the ryots should in any one instance be responsible. Existing rules fix this at Rupees 25 without the smallest reference to the size or revenue or nature of the particular irrigation work. But if Rupees 25 is the amount of repair which the ryots of a work with an ayacut of, say, Rupees 100 may fairly be required to perform without payment, surely it cannot be fair that the ryots of a work ten times as big should be required to do no more. No one, I think, will argue that it is. I submit therefore that the amount of *Kudimaramut* should not be fixed, but should vary with the circumstances. The rigidity and I may say inequity of the present rule has always seemed to me a chief reason of its failure to effect the objects for which it was designed. Empirical rules the incidence of which is unequal are never likely to be heartily carried out by officials, or to be cheerfully obeyed by the people.

Ed. W. J. Lewis.

1322
10

From C. T. LONGLEY, Esq., Collector of Salem, to the Acting Secretary to the Board of Revenue, dated Womalore, 22nd June 1876, No. 139.

With reference to the Board's Miscellaneous No. 9,483, of the 20th October last, I have the honor to state that, in the absence of any penal provision, the only effectual way of enforcing the rules regarding the management of tank calingulabs is by making the head of the village (the Monigar and Munsif) responsible for the due performance of the work. It is useless to expect the villagers *jointly* to do the work, and any threat of withholding remissions has, I know from experience, little or no effect. Everybody's work is nobody's work, and the consequence is that the work is never done. I would therefore entrust the work to the Monigar and Munsif of the village, and give him the aid of one or two Neerkatties according to the capacity of the tank. The Village Service Fund of the district can afford to entertain the Neerkatties thus employed.

2. I regret the delay which, owing to an oversight, has occurred in replying to this reference.

Ezd. J. Tulloch.

26 May 1876

1874
1-24-

REVENUE DEPARTMENT.

No. 3758

From Com. W. of Rev.

Dated 12: Sept 1876

FOR ORDERS.

~~Minerals~~ ~~not~~ ~~Inter~~ ~~are~~ ~~with~~ ~~in~~ ~~land~~
The practice is an immemorial, reasonable and in most cases indispensable practice & precaution in the maintenance of which, under due regulation is necessary under the circumstances of the country, in the rights of the people and interests and needs of the State Revenue - and I would modify the rules in accordance with the suggestions of the Board. Nothing short of this is fair to the people or the State.

I would not object to a clause in the rules that when the District Engineers

Rec'd 18
3758/76

certifies to the satisfaction
of the collector that the
Calingulak is up to the
Full Tank Level, is
measures of the kind
Contemplated may be
enforced and such
tanks registered under
the rules. Wherever
dams are necessary
their construction
must be permitted
according to ancient
Communal usage and
the risk must be run
subject to restrictions
as to remissions of
demand in case of
breach from negligence.

I believe that the
whole difficulty in these
matters arises from the
mistake of assuming
that the mass of these

do not amount to
interests

1874

1-211 -

935

149

1084

Communal village
work & property is State
property; and their
maintenance State
work, for which the
Govt. is responsible
to the people in respect
to management &c. They
are Communal works
for the inspection of
which the State may,
in the interest of the
Revenue, be responsible,
the maintenance of which
the Govt. should have
the power to enforce,
and perhaps contribute
to. Were this recognized
and enforced, the
difficulty would
disappear & efficiency
would

but I don't object to
State property or
State work & main-
tenance

c. 15: 24/76 a 21. 24

The Government having in
their Order dated 1st July 1875, 1831
P.W.D. directed the issue of a notice
requiring the clearance without
fail of all Calingulahs of tanks
at least a fortnight before the
usual date of the setting in of the
periodical rains under pain of
forfeiture of all claim to remission
wherever the duty may be neglected.

the Board's Circular Order No. XIX of
1875 was promulgated. Subsequently
the Government in their order
dated 25th August 1875 No. 2433 D.P.W.
called for a report on the way in
which sanctioned rules regarding
the management of tank Caling
gulahs are to be enforced
and the effect of the measures
proposed; whilst in G.O. dated
10th March 1876 No. 359 R.D. the

outlet for sluice
for carrying off
the surplus
water

the Board were directed to enquire
and report whether the observance
of the foregoing Circular Order has
not operated to the prejudice of
the ryots and Government owing
to the insufficiency of the late North
East Monsoon. The letters read
above are the replies of the Collectors
consulted to the two references
and as the subjects are intimately
connected they may be considered
together.

2. As regards the question
whether the Order has operated
prejudicially to the ryots and
Government the general tenor
of the replies is to the effect that
no loss has resulted, but that this
was owing to the deficient rain-
fall in consequence of which
the tanks never overflowed
the

the crest of the Calingulaks. In
Kellone and Luncenally some loss
has been attributed to the enforcement
of the rule regarding the clearance
of Calingulaks, but no reliance is
to be placed on the estimates the
Collector of Madras on the
other hand reports that the effect
of the order, so far as it was observed
was beneficial as it probably prevented
some tanks being breached by the
violent rains which occurred in
October. The Collector of Chingleput
and South Arcot remark that
the fact, that no loss resulted,
was due to the deficiency of the
rainfall and that the enforcement
of the order will lead to such
loss of revenue in ordinary years
owing to the crests of ^{the} Calingulaks
being in the majority of cases
much too low. Mr. Garstin
is

132/5
is of opinion that the application
of the order should be confined
to cases in which the Calingulaks
are of a height corresponding to
full tank level and expresses
his belief that in all other
cases Calingulaks may be banded
up with turf to that level with
perfect safety all the year round.
Mr. Stuart thinks the order has
been but little acted upon, being
difficult to enforce all over the
Country, and is satisfied that a rigid
enforcement would lead to very
serious loss. He points out that
it not infrequently happens that
the first burst of the monsoon is
the only really good fall in the
season, and that if the Calingulaks
are opened the tanks will not
afterwards fill. He considers that
the matter may be left to the villagers
and

and village officers, who are on the spot, are deeply interested in the safety of the works and know all the local peculiarities which render it safe in some cases to keep Calingulaks closed and in others to open them partially or only when the tank is in actual danger.

3. The reference is regard to the manner in which sanctioned rules respecting the management of tank Calingulaks are to be enforced arose from the expression of doubts by the Chief Engineer for Irrigation as to whether the law relating to "Mischief" was not applicable to the case of villagers transgressing rules for the preservation of works of irrigation. The question was referred for the opinion of the Collectors of North Arcot, Salem,uddalaka South Arcot, and Madurai.

W. H. G. G. G.

132/6

Mr. Horsley states that he has directed that Calingulaks and waste wars are not to be touched by any one except a D.M. officer, a rule which is capable of enforcement and nobody can mistake. Mr. Whiteside considers that although transgression of the rules does not bring the case within the definition of Mischief the villagers might be punished under Section 188 of the Indian Penal Code, if a notice forbidding the bunding of Calingulaks were promulgated in the villages and served on the village headmen. He considers departmental punishment of the village officers and withholding of remissions sufficient inducements to secure the observance of the regulations. The Board cannot concur with Mr. Whiteside in considering the section quoted

quoted by him applicable. The
disobedience to which that provision
of the law applies must be such
as causes or tends to cause obstruction
annoyance, or injury, or risk of ob-
struction, annoyance, or injury, to
any person lawfully employed and
the omission to clear the bund of
a Catungulah can scarcely be said
to tend directly to any of these results.

Mr. Garstin considers that the
only way of enforcing the orders in
the absence of a special law, is by
punishing the Monegars and with holding
remissions and considers that the
proper safeguard is the substitution
of self regulating flush escapes.

after which any person erecting a
dam on a Catungulah would clearly
be endangering the safety of the tank
and could be dealt with ^{penally}.

Mr. Bliss deals with the question
in connection with the subject
of

137
of "Hudim aramuk" and considers
that a remedy is to be sought in
some measure which will make the
whole body of villagers and not the
village officers only, responsible.
He advocates special legislation
for the purpose of making it obli-
gatory on the ryots to perform all
earth work repairs to Minor Works
of Irrigation, with the intention
it is presumed, so far as the present
question is concerned, of increasing
their stake in the safety of the tank
and rendering them more careful.
The Board have already dealt with
Mr. Bliss' proposals in separate Proceedings.
Mr. Longley considers that the head
of the village must be held responsible
and that ^{irrigators} should be
entertained to assist him. Schemes
for the revision of village establish-
ments are under preparation
in Salem and the requisite
provision

6 May 76 No 1192

x distributors
of the water
supply

provision can be made whenever necessary and funds suffice.

H. It is clear that the present rule if strictly enforced will entail considerable loss on both the ryots and Government and the Board are of opinion that the bunding of Calingulaks with loose earth or other material easily washed away by a rush of water must be recognized to a certain extent. It is admitted that the crest level of the Calingulaks might with safety be raised in most cases, and if this were done the order regarding clearance might and should be strictly enforced, but any measure of this nature must be a work of time and there is no immediate prospect of the remedy

remedy being applied. The Board therefore, adhere to the views expressed in their letter recorded in G.O. dated 9 July 1873 No 1756. Theoretically the Engineer Officers are doubtless right in holding that there is a risk in restricting the escape of surplus water from tanks at the commencement of the monsoon when the fall of rain may be expected to be heaviest, but it may be said without disparagement that the Engineer and ryots stand points are essentially different. The former regards an Irrigation work mainly from a professional point of view, his chief object being to preserve the Tank from injury and avert all risk of its bursting. He

The ryot's attention on the other hand is more concentrated on the prospects of his harvest. He knows - by dearly bought experience, that unless the level of the water is kept above the crest of the Calingulah there will not be a sufficient supply to mature his crop, that in most seasons the tank will not overflow its Calingulah more than once in the year and that if he is to take any steps for the storage of water at all, he must do so from the commencement of the season. The order directing the clearance of Calingulahs by the 1st October and prohibiting their being closed until the first burst of the monsoon is over, ^{virtually} precludes the storage of a full tank supply as it rarely happens that there is any discharge after the burst is over.

5. The ryot must therefore, disobey the orders of Government or consent to risk the loss of his crop, he prefers to risk the displeasure of the Authorities to the loss of his paddy and does surreptitiously what he dare not do openly. The Calingulah is stuffed as tight as possible and left to itself, whereas if the practice were recognised the Calingulahs would be carefully watched and opened whenever danger threatened. As regards all ordinary tanks not forming links in a connected chain and not in a position to endanger lines of rail the Board think permission might be accorded to the ryots to raise calingulahs on condition that the tanks should be carefully watched by the Kirgunties.

and others day and night during
the setting in of the monsoon and
in rainy and stormy weather and
that no remission would be given
in the event of a tank bursting
owing to neglect of precautions
on the part of the villagers generally.
Theyots have a keen sense of their
own interests and the bursting
of a tank is a far more serious
loss to them than to the State;
they may be trusted therefore
to look after their own interests.
More stringent rules are doubtless
required where other interests
are at stake, as for instance
where tanks are in dangerous
proximity to lines of rail or
where they form portions of
a long series extending
once

92/3
over several villages - in such
cases there is more than one
set of interests involved and
clearance must be insisted
upon unless close watching can
be insured. It should also
be provided that all Catingulaks
should be cleared at least once
a year as the risk is increased
by allowing the bunds to stand
year after year until they
become hardened to such an
extent that water will not
readily wash them away.
6. On these grounds the Board
considers that there will be
less risk in trusting to the ryots
than in endeavouring to force
them to abstain from a practice
which experience has shown

to be beneficial to their interests
The village officers must be
held responsible for seeing
that such rules as may eventu-
ally be decided upon are
duly carried out, they not being
subjected to loss of remission
when injury results through
their neglect. The provisions
of the Penal Code relating to
"Mischief" are in the Board's
opinion inapplicable to any
infringement of the rules prohibiting
breaching of Calungulaks or refusing
clearance before a certain date,
as the knowledge that "wrongful
loss" is likely to result from any
such act or omission, which
is an essential element of the
offence, cannot fairly be presumed

132/2
in the present state of Laik
Calungulaks it being an admitted
fact that with proper precautions
dams may be erected with perfect
safety. Special legislation must,
therefore, be resorted to if penal
consequences are to attach to any act
or omission in contravention of the
rules, but the Board would deprecate
any such measure.

(Incl. & track)

Col. G. L. G. L. G.
Acting Secretary
To
The Secretary to Government
Police Department
with 17 original letters to her returned
and a file of printed replies

W. S. W. S.
Col. P. S. P. S.

N. 2758

Dec. 1876: 2 yds

Proceedings of the Board of Public Works

Dec 12 1876
Dec 12 1876
Dec 12 1876

Dec 12 1876
Dec 12 1876
Dec 12 1876

Dec 12 1876
Dec 12 1876
Dec 12 1876

2-15-44/76. R 21. 44

Form in Dec

Dec 12 1876

The Government agree with the

Board in the view expressed herein

in favor of the proposed

The order issued in the Public Works

though calculated to secure fully the

safety of the lands by directing the

of the California on the western setting

in still experience has clearly shown that

the direct enforcement of the order leads

to wastage of water which should

be directed for cultivation & is often

resulting in loss of crops to the extent of

several hundred acres. The practical

experience has indicated that irrigation

is necessary

the State of California, not admitting of the

condition in such cases, it is clearly