

(1) Number of pages 20

(2) Date of repair 19.10.70

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue

DEPARTMENT

G.O. No.	66	Press
B.P. No.		Mis.
Dated	9.1.1877	196

Not to be folded or roughly handled

No. 144. Read the following Proceedings of the Board of Revenue, dated 23rd November 1876, No. 2,933:—

Read the following letter from W. R. ROBERTSON, Esq., M.R.A.C., Superintendent of Government Farms, to H. E. STOKES, Esq., Acting Secretary to the Board of Revenue, dated Sydapet, 12th October 1876, No. 979.

I HAVE the honor to submit a letter, No. 169, of the 23rd of August, from the Collector of Coimbatore, and a copy of a letter, No. 116, of the 7th of August, from his Head Assistant Collector to his address, with one statement and one sketch, referring to the proposal to establish the Coimbatore District Experimental Farm at Pollachy.

2. HEAD ASSISTANT COLLECTOR'S LETTER.—*Paragraph 2.*—I agree with Mr. Mackenzie in thinking that live-stock must suffer severely in the neighbourhood of Pollachy during the south-west monsoon; the cold and high winds with heavy rains that then prevail cannot but be very prejudicial to the health of live-stock, especially to the health of stock in a weakened and debilitated state from the scarcity of food, and great heat experienced during the few months previous to the beginning of the south-west monsoon; this is, I consider, a very serious objection to the selection of Pollachy as a site for the Coimbatore Farm. I attach no particular importance to the other objections raised; the fields could readily be increased in size, good fences might be established, and the quality of the tobacco might be improved.

Paragraph 5.—It is true that in most parts of this Presidency the success of agricultural operations depends very materially on the rainfall, but there is ample evidence even in the taluq of Oodumulpet, to which Mr. Mackenzie's observations refer, to prove that scanty as the rainfall is, it is not utilized to the extent it might be, were the ryots more energetic and skillful. Deep cultivation and the liberal use of organic manures would materially increase the absorptive powers of the soils, but nowhere in the district, except on a very limited scale, when the land is broken up by crowbars, is there any attempt to improve matters in this direction. If the soils were rendered more absorptive they would take up from the atmosphere large quantities of watery vapor, and the rainfall instead of flowing off into the nearest ditch or nullah would pass into the soil. And nowhere in the district has the ryot done anything by planting to improve the climate. Unfavorable as the general climate of greater part of Coimbatore undoubtedly is, nothing has as yet been attempted to improve it by any of the means which, in a more civilized country, would have been put in operation.

Paragraphs 6, 7, 8, 9, and 10.—I visited the locality indicated, and went some distance along the banks of the Palur river, but do not know whether I saw the tract of land referred to by Mr. Mackenzie. The general impression I formed was, that the locality was suited in some respects for the establishment of an experimental farm, but I feared that the neighbourhood was feverish and unhealthy. The drawbacks mentioned by Mr. Mackenzie are, I think, sufficient to neutralize any advantages the site may possess, and the rent asked is prohibitive.

Paragraph 11.—I agree with Mr. Mackenzie in thinking that the site situated three miles to the north-east of the town of Annamallay is, from its position, quite unsuited for our purpose.

Paragraph 12.—There seems nothing whatever to recommend the selection of this site, and both Mr. Mackenzie and Mr. Wedderburn appear to agree in this.

3. COLLECTOR'S LETTER—Paragraphs 7, 8, and 9.—The opinions herein expressed are confirmatory of these ~~already~~ noticed, regarding the unsuitability of the site near the town of Pollachy.

Paragraphs 10, 11, 12, and 13.—As a general rule, green fodder can be raised by the aid of irrigation water from a well, or other source, at a less cost per ton than under dry cultivation. The question is, not whether it pays to feed stock on fodder raised under irrigation? but *whether it pays to have a famine every third or fourth year? whether it pays to lose stock by death during a drought? or when the ploughing season comes, whether it pays to possess only debilitated bullocks capable of performing only half the labor that in good condition they could with ease perform.* Agriculturists never expect to get a direct return in money for the green crops, whether roots or fodder, they raise. It is in an indirect way that the farmer benefits from growing these crops; in the abundance of manure afforded, in the general good health and condition of his live-stock, and in the improvement of his soils. The proposed farm was never intended to be a "Stock Farm" only, a "Sheep Farm" only, neither was it intended to be a "Commercial Farm;" hence Mr. Wedderburn's remarks regarding the results that would attend the working of any farm of the kind can have but little bearing on the question under discussion. It does pay to feed mutton at Madras, but the profit is small, unless sheep can be obtained for fattening that have not been periodically semi-starved. When sheep can be obtained that have always been maintained in fair condition, mutton can be produced of excellent quality at a moderate cost either in Madras or in Coimbatore.

Paragraphs 14 and 15.—The question is not whether it will pay to breed horses? but *whether anything can be done to improve the breed of horses of the district.* I believe that much can be done, not only by providing suitable stallions, but also by growing proper food for horses. There is, perhaps, not much at present to recommend Coimbatore as a horse-breeding district; however, *a good many horses are bred there.* It would be useless to send young, large, powerful gallows into the district, as Mr. Wedderburn suggests, unless at the same time something is done to provide suitable food for horses; a grass, or a clover might be introduced, through the agency of the farm, which might solve the horse-breeding difficulty.

Paragraph 17—confirms the views before expressed as to the unsuitability of the site near Pollachy.

Paragraph 18.—The site I recommended at Othikkalmundapam does afford one block of land on which cotton, tobacco, green crops and mulberries will grow, and on which horse and sheep-breeding could be carried on.

Paragraph 19.—The district farm at Coimbatore was never intended to be a mere "self-supporting farm;" such a farm could effect no good. Mr. Wedderburn is quite aware that experimental farms are never expected to return in money the outlay incurred on their behalf. In a letter, No. 196, of the 7th of December 1872, printed in Board's Proceedings, No. 135, of the 1st February 1873, at paragraph 9, he observes: "Of course, all experimental farming must be at first carried on at a loss." Again, in paragraph 4 of his letter, No. 64, of the 1st of May 1873, printed in Board's Proceedings, No. 947, of the 6th June, he observes: " * * * but all experimental farms are carried on to a certain loss." The results that spring from the working of

experimental farms frequently possess a value far in excess of the money expended. If the farms to be established effect nothing else, the elementary information they will afford cannot but be useful to the officers engaged in the management of the vast landed property held by Government. But, if intelligently conducted, I am convinced that experimental farms will do a great deal more than this. I think that paragraph 3 of G.O., No. 1,657, of the 22nd September 1871, describes in an admirable way the work of an experimental farm: conducted with such aims the proposed farms cannot but prove highly advantageous to the districts in which established.

Paragraph 21.—The plots of land scattered in different parts of the Municipality of Coimbatore, in some instances widely apart, would be of no use for the purposes of the farm to be established. The Municipality would, I should imagine, demand from Government the full value of their land and of the wells they have sunk. I do not know the cost of these wells, but I was shown one that cost Rupees 1,200, and which, under any circumstances, could not water more than four acres of land; the charge for interest alone on the land watered *would thus be at the least Rupees 30 per acre per annum*, which, with Rupees 40 per acre per annum for raising the water, would make *the yearly fixed charges Rupees 70 per acre.*

4. I still hold the opinion that the site I recommended, situated near Othikkalmundapam, is, all things considered, perhaps the best that can be obtained for the Coimbatore District Experimental Farm. As to the land being "ancestral" property all I can say is, that at the time I inspected it, the principal renter who rents I believe, upwards of 100 acres informed me that greater part of his land was, about thirty years ago, given to him on rent by the Collector, and that nothing was paid for obtaining possession. I should be sorry to recommend that any measures which might be thought severe should be adopted in order to secure a site for the farm; but I see little or no probability of any suitable site being obtained at a fair cost, unless the Land Acquisition Act is put in operation. I can, of course, fully understand, that the ryots, with such knowledge as they possess, and perhaps the subordinate revenue officials also, would prefer that the farm should be established under circumstances of not too favorable a character, while if the belief is general that the farm is to be a self-supporting institution, or a mere financial experiment, it would not be surprising that the ryots should view its establishment with suspicion. The site at Othikkalmundapam is not a very good one from an ordinary agricultural point of view, but as the experimental farm will be engaged in raising superior seeds in acclimatizing live-stock and agricultural crops, and will be a depot at which probably stallions, bulls, and rams will be stationed, the conditions it affords seem to comply peculiarly with our requirements. There are thousands of acres of land in Coimbatore, on the banks of the Bhowani, Amaravathy, Noyle, and other rivers, that would produce much more heavily.

5. If neither the site at Pollachy, nor at Othikkalmundapam, is to be appropriated for the purposes of the Coimbatore Experimental Farm, I would suggest that a block of land, situated between the town of Coimbatore and the Pothenore Railway Station on the banks of the Noyle channel, might possibly be obtained. The land watered by the channel would be expensive, but a large area would not be required; while the dry land adjoining should not cost much more than the price asked for that at Pollachy.

ENCLOSURE No. 1.

From A. WEDDELBURN, Esq., Collector of Coimbatore, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated 23rd August 1876, No. 169.

With reference to the Proceedings of the Board of Revenue, dated 7th June 1876, No. 1,501, requesting me to select a site for a model

1 Copy of letter from the Head Assistant Collector,
dated 7th August 1876, No. 116.
1 Statement.
1 Sketch.

farm in the neighbourhood of Cusbah, Pollachy, I have the honor to annex copy of a letter from my Head Assistant on the subject.

2. From this it appears that a lease of 169-69 acres of land may be had about five or six miles south-west of Cusbah, Pollachy.

3. I inspected the place with Mr. Mackenzie, and was told, which I readily believe from inspection, that the water-supply is defective. The 50 acres dependent thereon, are the putta property of the Minor of Samattoor under wardship. The rent of the land is stated to be Rupees 2,268-8-0 per annum. It appears to be out of the way—we got to the place by a long lane diverging from the public road at four miles south from Pollachy.

4. Another site was inspected about seven miles to the west of this land—about two miles east of Annamallay village—it is out of the way, and similar to land noted in the next paragraph.

5. The third site proposed is some fields on the west of the Pollachy Cusbah, about quarter mile from the town, of which a sketch is enclosed—the extent, 219-84 acres. It is all punjah or dry land with eight wells.

6. It is not possible to procure 200 acres of waste land, fit for cultivation, any where—the land must be purchased or rented. Mr. Mackenzie does not appear to have agreed with the owners, who are willing to sell, about the price, but he values the land all over at Rupees 25 per acre. It is not probable that the owners of the eight wells will sell their lands dependent on these wells, at this rate—seeing that the rent-value is six times more than that of unimproved land. The wells alone will have cost at least Rupees 200 each, or say Rupees 1,600.

7. On my inspection it appeared that one-tenth of the best and lower-lying land was selected for irrigation by wells; the rent of the land improved by a well has been calculated on the half gross produce, which seems, per acre, to be Rupees 16 per annum, while that of the unimproved land is three per acre; this may give an indication of the value of the land dependent on rain fall, which forms about 200 acres out of the 219.

8. HORSE AND SHEEP-BREEDING.—I do not think stock could be reared on such land—which grows a crop of the inferior small grains, such as *Sami* and *Corrali*.

9. To support stock in this country, there must be both good dry fodder stored, and green fodder, which can only, in this climate, be raised by well irrigation; the light grain fodder from the above-named grain grasses would not feed cattle.

10. GREEN FODDER.—Mr. Robertson will, however, be able to say whether from the well-irrigated land, he can profitably grow fodder for the stock, paying the half value of an irrigated crop for the same, in addition to the cost of cultivation. My impression is that a stock farm cannot be profitably conducted without natural grazing, and natural grass would not outlast the rains—for say one-fourth or one-third of the year.

11. I do not think that a sheep farm would pay by stall-feeding, it does not pay in Madras—and if tried here, there is the prohibitive charge by railway to be added.

12. The good mutton of Coimbatore is not that of the indigenous long-wooled diminutive sheep, which gather their scanty subsistence from pasturing on chance fallows, but it is that of the red Carnatic, or Salem, coarse-haired sheep, which is home-fed.

13. The white-wooled grass-fed sheep is sold at the price of goat's flesh, and is not in repute.

14. I do not think horses could be bred to any profit; when fit for sale, if they survived, they would cost in feeding more than they could be bought for elsewhere. They would, like sheep, not find grazing, and there is no sufficient natural command of water to grow green fodder.

15. The loan of one or two young, large-boned, powerful galloways would do more to improve the weedy native pony, but the horses must not be old, or ineffective, as the two last tried were, whose services were, at last, declined. If a country is suited for breeding horses, it will generally be found that horses are bred; if not suited for breeding, they degenerate. It would be cheaper to buy an imported Burmah pony than to try to breed one; the climate there is good for pony-breeding, whereas here there is insufficient pasturage.

16. TOBACCO.—Mr. Mackenzie states that the tobacco grown near Pollachy is inferior. I have tried tobacco growing, and found that a lime-stone soil, with very heavy manure, produced a large fine leaf; the soil at Pollachy is a sandy loam. I tried a better red-loam soil at Coimbatore, the leaf was as large, but coarse, and was sold for Malabar use, where it is chewed.

17. COTTON.—The neighbourhood of Pollachy is not adapted for cotton; cotton is grown where it is known to succeed, and that is on the heavy black soils; but these lie a good way to the east of the proposed farm.

18. I am not aware of any place where cotton, tobacco, green crops, mulberry, together with horse and sheep-breeding, can be carried on in one block. The climate of Pollachy is, at the present season, exceptional; the western parts of it near the Cusbah have green rain-fed crops, while all to the east is uncultivated for want of rainfall, which does not extend much to the east, beyond the town of Pollachy; so far, it has a partially Malabar climate for three months, and may be said to be "exceptional."

19. My own opinion is that the scheme of a farm, to pay its expenses, may be given up for this district. I can foresee nothing but financial loss, and little prospect of imitation, under such circumstances; but, if the scheme is to be persisted in, I shall at once inquire about the price to be paid for the land. I don't think it will be less than Rupees 5,000, while it is not calculated to raise any but very inferior crops, unless at a large expenditure for well-sinking, which, moreover, involves risks in finding springs and in coming on solid rock.

20. To sum up—

The distinct objects at which Government aim are epitomised as follows:—

(1.) To ascertain by experiment the proper use of rotation in crops in this country. (In this district such rotation as is possible and profitable is well understood).

(2.) To introduce the system of root, or green crops, instead of fallow without artificial "irrigation."

In this district, the land that could produce a root or green crop is fallow, in consequence of the want of water. No root, or grass, or crops of any kind, could therefore be grown in such a case.

(3.) To introduce new crops.

(4.) To provide new kinds of seed.

(5.) "To make experiments in the use of water for the cultivation of crops now termed 'dry' crops, and for raising grasses and other crops to be used as fodder."

What are termed "dry crops," such as tobacco, and certain cereals, raggi, cholam, &c., are already extensively, in fact generally, cultivated with the aid of wells; when such exist the experiment, therefore, would not be new, and all "paying" cultivations are known. The ryots will not go to the expense of watering "fodder" crops; water is too expensive, and can only economically be bestowed on more valuable and higher-priced cultivation, such as cereals, vegetables, and tobacco.

(6.) "To make experiments in the use of lime and 'other' manures;" the soil is nearly lime, and not such as can be improved by addition of that element. Human manure the ryots will not handle.

(7.) To introduce new and improved implements of rural labor; the ryots will not pay for an English plough, neither can their cattle draw one.

(8.) To improve the working cattle, sheep, horses and other varieties of live-stock. The ryots will not follow any course pointed out to them, unless there is both a manifest saving, and also an absence of preliminary expense; no improvements can be suggested that do

not involve expense, and the ryots are too poor to incur it. They have no margin of money; they just live by their land, and by their labor put into it, and no more. The Madras Farm, where water is near the surface, and climate moist, is carried on at a financial loss; the products do not pay the expense.

In Mr. Sim's Minute, he says: "If the system pursued be beyond the ryot's means, the example cannot be followed, and a number of Show Farms, maintained at the expense of the State, will be the only result."

21. To save Government, or rather the Pound or Local Funds which are indented on, this inevitable expense, I could offer 40 acres of land in the Municipality of Coimbatore, supplied with ten wells, eight of these having an improved water-lift. This land is all improved, and planted with cocoanuts; 8 acres are under guinea-grass, 1 under lucerne and China sugar-cane, 4½ under cotton, 1½ under mulberry, and 10½ under tobacco.

The farm resembles a congeries of small ryots' holdings—8, 6, 2 and 3-acre lots, with one or two wells to each. These petty sewage farms are just the thing to teach the ryot the use of the only new manure he is ever likely to get. I do not say that the example will be at all followed; but at any rate, there will not be the financial loss of the farm if tried elsewhere. There would be a market for green fodder—in waterless Coimbatore, it being consumed by the conservancy bullocks; there is also a demand for improved tobacco, and silk—every thing is ready prepared. Improved instruments are at work, viz., ploughs and digging forks. If a good Overseer was appointed, the Superintendent of the Government Farm or his Assistant, in a night's journey, could pay an occasional inspection; and the farm would be visible to all visitors to Coimbatore, and not merely to chance passengers to Pollachy.

22. I throw out the suggestion, if saving of expense is any object, and mention the fact, to show that the people have already an opportunity of seeing the possible improvements* proposed to be introduced.

* Tobacco, Cotton,
Green-fodder, Mulberry.

FORWARDED through the Superintendent of Government Farms for early transmission to the Board of Revenue, with remarks.

(Signed) A. WEDDERBURN,
Collector.

ENCLOSURE No. 2.

From G. MACKENZIE, Esq., Acting Head Assistant Collector, to A. WEDDERBURN, Esq.,
Collector of Coimbatore, dated Oodumulpettah, 7th August 1876, No. 116.

I HAVE the honor to reply to your endorsement, No. 547, on Board's Proceedings of the 7th June.

2. In looking for a site for the model farm near Pollachy, I have not been able to keep in view all the objects given in paragraph 9 of G.O. of 22nd September 1871. That part of the district does not grow much tobacco, and what is grown is of inferior quality. There can be little or no market for butcher meat. A few Mahomedans only live in Pollachy. The small fields fenced with euphorbia-hedges would not be suitable for raising horses or sheep, and, moreover, as Pollachy is opposite the Palghat gap, the west wind would be very trying to young stock after the hot weather in each year. I have seen, in the month of May, the west wind, damp and cold, blowing with strength sufficient to tear out of the ground the young stalks of cholam. As for lime, there is abundance of nodular lime-stone (kunkur,) to be found all round Pollachy.

3. In silk and tobacco, the Coimbatore Municipality has anticipated the model farm. There are now about thirty healthy young mulberry trees in the garden of the Poligar of Samattoor, and mulberry cuttings have been sent to that garden and to Ootocooly from the Coimbatore Municipality's garden.

4. There is no suitable piece of waste land to be found near Pollachy. The ground is entirely under cultivation, except in parts within the fever range under the Annamallay Hills, and

in places on the Malabar frontier. The obvious objection is to taking up a site there are that very few Tamil ryots ever go to that corner of the district, and that the success of the farm would be attributed to the Malabar rainfall and not to any improved methods.

5. This is an idea that ought not to be put aside. In this district, at the present time, one is inclined to say that rainfall is everything and improved methods almost nothing. The day before yesterday I was near the Malabar frontier, and the eye was gladdened by a magnificent expanse of green cultivation. To-day, in Oodumulpettah Taluq, only five and twenty miles eastwards, one can see nothing but dust and a desolate waste of parched country. Hardly any rain has fallen in this taluq for nine months past, and the best agriculture can do nothing in these circumstances. This is what makes it difficult to select a site for a model farm. If it is not favored by climate, the farm will be a failure; and if favored by climate, the rainfall will get the credit of any success.

6. The site I selected lies about five miles south of Pollachy, and adjoins the road leading direct to the Annamallay Hills. On Atlas Sheet No. 62 is marked a small tank between the villages of Samattoor and Somanthoray, lying parallel to the Palar river. The site is at the south end of this small tank, and extends from the river to the road. A rough sketch is enclosed. It is not drawn to scale.

7. This small tank is fed by a channel which runs from an ancient throw across the Palar, at a spot between the villages of Thoraoor and Upillanoor. The proposed site includes irrigated fields under the tank, fields in the bed of the tank classed as wet, pasture in the tank bed, and dry fields above the tank. There is a well in these dry fields. The supply channel flows through these dry fields. There is a cart-road from the east which passes through these fields to the main road. The site is in many respects well adapted for experimental cultivation.

8. There are three drawbacks to this site. It is five miles south of Pollachy and would not be much in the way of ryots. A glance at the map shows that the water in the Palar is dependent on the rainfall on a very limited extent of the Annamallay Hills, the extent between Mandop and Poondy. In some years this fails. The third drawback is that about 50 acres of wet land under the tank are held on putta by the Poligar of Samattoor, at present a Ward of the Court. The Collector, as manager, has legal power to lease these lands from year to year during the minority. The Poligar will come of age in 1879.

9. The site forms part of the lands of the Government villages of Somanthoray and Kariyanchetty palayam. The 50 acres mentioned above are held on putta by the young Poligar and do not form part of his Poliput. Portion of the site is held by Chittoor Ramasawmy Moodelly, a well-known ryot, who lives in the immediate neighbourhood. The Puttadars will not sell their land but have given a general consent to lease it for a term of years. I have taken no formal agreement from them. Their terms are very high. For wet lands they ask Rupees 30 per cawny per annum, and for dry land, according to the estimated yield of the soil, which is about two pothies or Rupees 24* per bullah.

* Note.—Rupees 6 per acre.

The trees on some of the fields were taken into account. The total rent will be Rupees 2,262-8-0 per annum for acres 169-69.

10. The enclosed statement marked A shows the extent and other particulars. Out of the acres 70-70 classed as wet, about 56 are under the tank, and about 15 are in the tank bed, and at present bear a crop of cholam. The acres 98-89, classed dry, are at present under cholam or left fallow for pasture.

11. Another site for a farm was shown to us by Chittoor Ramasawmy Moodelly, about three miles north-east of the town of Annamallay. The soil is very good, and the site in many respects admirable; but as you remarked that the situation between two rivers without bridges was an insuperable objection, I have done nothing more in regard to that site.

12. If the site near Somanthoray is considered too far out of the way, I would recommend fields close to Pollachy, which can be seen by all the ryots coming to that town. With this view, I have prepared a rough sketch of the fields lying in the angle of the Coimbatore and Palghat roads, adjoining the compound of the bungalow I at present rent from the London Mission. The whole

block of fields comprises an area of acres 219.84 dry land. It is undulating land, and is partly irrigated by wells. The soil at the bottom of the slopes is good, and these fields would be very suitable for experimental dry cultivation or for market-gardening under wells.

13. The Puttadars have been consulted, and they are all willing to sell their land. No formal agreement has been taken from them, but the average price would be about Rupees 25 per acre, or Rupees 5,000 for the block. The owners of the fields marked with a red cross are willing to rent their land for a term of years, but the others refuse, saying that they would be left without occupation.

14. I enclose a list marked B of the fields comprising this block. Acres 219.84 does not include the compound of the London Mission bungalow, but that can be added if you consider it required for the farm-steading. The compound and bungalow have been valued at about Rs. 600, but I have not asked the London Mission if they are willing to sell.

15. The fields marked with the blue pencil were not included, because one belongs to the London Mission, and the ownership of the other is in dispute.

16. Some of the items in Lord Napier's estimate can be much reduced. There are roads, and the fields are cultivated. The native Manager could rent a residence in Pollachy, quarter of a mile from his farm, for Rupees 2 or Rupees 3 per mensem.

(True Copy.)

Signed) A. MARTINDALE,
for Collector.

ENCLOSURE No. 3.—Statement.

ENCLOSURE No. 4.—Sketch map.

From this correspondence, and that which has preceded it, reaching back to April 1872, the Board are led to the conclusion that the proposal to establish an experimental farm in Coimbatore must, for the present, be abandoned.

2. The Collector of Tinnevely will now be requested to select, in communication with Mr. Robertson, a suitable site in his district. His attention will be directed to G.O., dated 22nd September 1871, No. 1,657, wherein the objects to be kept in view are clearly indicated.

(True Copies and Extract.)

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

No. 145.

ORDER THEREON, 9th January 1877, No. 66.

Miscellaneous.

THE Government agree with the Board that the proposal to establish an experimental farm at Coimbatore should,

under the circumstances stated, be abandoned.

2. The report of the Collector of Tinnevely is awaited. Mr. Robertson should endeavour to make farms in the districts such as would incite the land-owners to establish farms of their own on the Government model; and this object can never be attained unless the farms are conducted on a more economical scale.

(True Extract.)

(Signed) J. H. GARSTIN,
Acting Secretary to Government.

To the Board of Revenue.

Exd. F. R. Bantleman.

No. 2,933.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 23rd November 1876.

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Paragraph 5.—It is true that in most parts of this Presidency the success of agricultural operations depends very materially on the rainfall, but there is ample evidence even in the taluq of Oodumulpet, to which Mr. Mackenzie's observations refer, to prove that scanty as the rainfall is, it is not utilized to the extent it might be, were the ryots more energetic and skilful. Deep cultivation and the liberal use of organic manures would materially increase the absorptive powers of the soils, but nowhere in the district, except on a very limited scale, when the land is broken up by crowbars, is there any attempt to improve matters in this direction. If the soils were rendered more absorptive they would take up from the atmosphere large quantities of watery vapor, and the rainfall instead of flowing off into the nearest ditch or nullah would pass into the soil. And nowhere in the district has the ryot done anything by planting to improve the climate. Unfavorable as the general climate of greater part of Coimbatore undoubtedly is, nothing has as yet been attempted to improve it by any of the means which, in a more civilized country, would have been put in operation.

Paragraphs 6, 7, 8, 9, and 10.—I visited the locality indicated, and went some distance along the banks of the Palar river, but do not know whether I saw the tract of land referred to by Mr. Mackenzie. The general impression I formed was, that the locality was suited in some respects for the establishment of an experimental farm, but I feared that the neighbourhood was feverish and unhealthy. The drawbacks mentioned by Mr. Mackenzie are, I think, sufficient to neutralize any advantages the site may possess, and the rent asked is prohibitive.

Paragraph 11.—I agree with Mr. Mackenzie in thinking that the site situated three miles to the north-east of the town of Annamallay is, from its position, quite unsuited for our purpose.

Original

GOVT. OF COIMBATORE

REVENUE.

THE BOARD OF REVENUE

Dated January, 31st.

JANUARY.
- No. 14414B.

Experimental Farm in Coimbatore.—Arranging with the Board of Revenue to abandon the proposal to establish an —, and directing Mr. Robertson to make farms in the districts to be conducted on a more economical scale.

Paragraph 12.—There seems nothing whatever to recommend the selection of this site, and both Mr. Mackenzie and Mr. Wedderburn appear to agree in this.

3. COLLECTOR'S LETTER—Paragraphs 7, 8 and 9.—The opinions herein expressed are confirmatory of those already noticed, regarding the unsuitability of the site near the town of Pollachy.

Paragraphs 10, 11, 12 and 13.—As a general rule, green fodder can be raised by the aid of irrigation water from a well, or other source, at a less cost per ton than under dry cultivation. The question is, not whether it pays to feed stock on fodder raised under irrigation? but *whether it pays to have a famine every third or fourth year? whether it pays to lose stock by death during a drought? or when the ploughing season comes, whether it pays to possess only debilitated bullocks capable of performing only half the labor that if in good condition they could with ease perform.* Agriculturists never expect to get a direct return in money for the green crops, whether roots or fodder, they raise. It is in an indirect way that the farmer benefits from growing these crops; in the abundance of manure afforded, in the general good health and condition of his live-stock, and in the improvement of his soils. The proposed farm was never intended to be a "Stock Farm" only, a "Sheep Farm" only, neither was it intended to be a "Commercial Farm;" hence Mr. Wedderburn's remarks regarding the results that would attend the working of any farm of the kind can have but little bearing on the question under discussion. It does pay to feed mutton at Madras, but the profit is small, unless sheep can be obtained for fattening that have not been periodically semi-starved. When sheep can be obtained that have always been maintained in fair condition, mutton can be produced of excellent quality at a moderate cost either in Madras or in Coimbatore.

Paragraphs 14 and 15.—The question is not whether it will pay to breed horses? but *whether anything can be done to improve the breed of horses of the district.* I believe that much can be done, not only by providing suitable stallions, but also by growing proper food for horses. There is, perhaps, not much at present to recommend Coimbatore as a horse-breeding district; however, a good many horses are bred there. It would be useless to send young, large, powerful galloways into the district, as Mr. Wedderburn suggests, unless at the same time something is done to provide suitable food for horses; a grass, or a clover might be introduced, through the agency of the farm, which might solve the horse-breeding difficulty.

Paragraph 17—confirms the views before expressed as to the unsuitability of the site near Pollachy.

Paragraph 18.—The site I recommended at Othikkalmundapam does afford one block of land on which, cotton, tobacco, green crops and mulberries will grow, and on which horse and sheep-breeding could be carried on.

Paragraph 19.—The district farm at Coimbatore was never intended to be a mere "self-supporting farm;" such a farm could effect no good. Mr. Wedderburn is quite aware that experimental farms are never expected to return in money the outlay incurred on their behalf. In a letter, No. 196, of the 7th of December 1872, printed in Board's Proceedings, No. 135, of the 1st February 1873, at paragraph 9, he observes: "Of course, all experimental farming must be at first carried on at a loss." Again, in paragraph 4 of his letter, No. 61, of the 1st of May 1873, printed in Board's Proceedings, No. 947, of the 6th June, he observes: " * * * but all experimental

farms are carried on to a certain loss." The results that spring from the working of experimental farms frequently possess a value far in excess of the money expended. If the farms to be established effect nothing else, the elementary information they will afford cannot but be useful to the officers engaged in the management of the vast landed property held by Government. But, if intelligently conducted, I am convinced that experimental farms will do a great deal more than this. I think that paragraph 3 of G.O., No. 1,657, of the 22nd September 1871, describes in an admissible way the work of an experimental farm: conducted with such aims the proposed farms cannot but prove highly advantageous to the districts in which established.

Paragraph 21.—The plots of land scattered in different parts of the Municipality of Coimbatore, in some instances widely apart, would be of no use for the purposes of the farm to be established. The Municipality would, I should imagine, demand from Government the full value of their land and of the wells they have sunk. I do not know the cost of these wells, but I was shown one that cost Rupees 1,200, and which, under any circumstances, could not water more than four acres of land; the charge for interest alone on the land watered would thus be at the least Rupees 30 per acre per annum, which, with Rupees 40 per acre per annum for raising the water, would make the yearly fixed charges Rupees 70 per acre.

4. I still hold the opinion that the site I recommended, situated near Othikkalmundapam, is, all things considered, perhaps the best that can be obtained for the Coimbatore District Experimental Farm. As to the land being "ancestral" property, all I can say is, that at the time I inspected it, the principal renter who rents I believe, upwards of 100 acres informed me that, greater part of his land was, about thirty years ago, given to him on rent by the Collector, and that nothing was paid for obtaining possession. I should be sorry to recommend that any measures which might be thought severe should be adopted in order to secure a site for the farm; but I see little or no probability of any suitable site being obtained at a fair cost, unless the Land Acquisition Act is put in operation. I can, of course, fully understand, that the ryots, with such knowledge as they possess, and perhaps the subordinate revenue officials also, would prefer that the farm should be established under circumstances of not too favorable a character, while if the belief is general that the farm is to be a self-supporting institution, or a mere financial experiment, it would not be surprising that the ryots should view its establishment with suspicion. The site at Othikkalmundapam is not a very good one from an ordinary agricultural point of view, but as the experimental farm will be engaged in raising superior seeds in acclimatizing live-stock and agricultural crops, and will be a depot at which probably stallions, bulls, and rams will be stationed, the conditions it affords seem to comply peculiarly with our requirements. There are thousands of acres of land in Coimbatore, on the banks of the Bhowani, Amaravathy, Noyle and other rivers, that would produce much more heavily.

5. If neither the site at Pollachy, nor at Othikkalmundapam, is to be appropriated for the purposes of the Coimbatore Experimental Farm, I would suggest that a block of land, situated between the town of Coimbatore and the Pothanore Railway Station on the banks of the Noyle channel, might possibly be obtained. The land watered by the channel would be expensive, but a large area would not be required; while the dry land adjoining should not cost much more than the price asked for that at Pollachy.

ENCLOSURE No. 1.

From A. WEDDERBURN, Esq., Collector of Coimbatore, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated 23rd August 1876, No. 169.

With reference to the Proceedings of the Board of Revenue, dated 7th June 1876, No. 1,501, requesting me to select a site for a model

1. Copy of letter from the Head Assistant Collector, dated 7th August 1876, No. 116.
1. Statement.
1. Sketch.

farm in the neighbourhood of Cusbah, Pollachy, I have the honor to annex copy of a letter from my Head Assistant on the subject.

2. From this it appears that a lease of 169.69 acres of land may be had about five or six miles south-west of Cusbah, Pollachy.

3. I inspected the place with Mr. Mackenzie, and was told, which I readily believe from inspection, that the water-supply is defective. The 50 acres dependant thereon, are the putta property of the Minor of Samattoor under wardship. The rent of the land is stated to be Rupees 2,268-8-0 per annum. It appears to be out of the way—we got to the place by a long lane, diverging from the public road at four miles south from Pollachy.

4. Another site was inspected about seven miles to the west of this land—about two miles east of Annamallay village—it is out of the way, and similar to land noted in the next paragraph.

5. The third site proposed is some fields on the west of the Pollachy Cusbah, about quarter mile from the town, of which a sketch is enclosed—the extent, 219.84 acres. It is all punjah or dry land with eight wells.

6. It is not possible to procure 200 acres of waste land, fit for cultivation, any where—the land must be purchased, or rented. Mr. Mackenzie does not appear to have agreed with the owners, who are willing to sell, about the price, but he values the land all over at Rupees 25 per acre. It is not probable that the owners of the eight wells will sell their lands dependant on these wells, at this rate—seeing that the rent-value is six times more than that of unimproved land. The wells alone will have cost at least Rupees 200 each, or say Rupees 1,600.

7. On my inspection it appeared that one-tenth of the best and lower-lying land was selected for irrigation by wells; the rent of the land improved by a well has been calculated on the half gross produce, which seems, per acre, to be Rupees 18 per annum, while that of the unimproved land is three per acre; this may give an indication of the value of the land dependant on rain fall, which forms about 200 acres out of the 219.

8. HORSE AND SHEEP-BREEDING.—I do not think stock could be reared on such land—which grows a crop of the inferior small grains, such as *Sami* and *Corrali*.

9. To support stock in this country, there must be both good dry fodder stored, and green fodder, which can only, in this climate, be raised by well irrigation; the light grain fodder from the above-named grain grasses would not feed cattle.

10. GREEN FODDER.—Mr. Robertson will, however, be able to say whether from the well-irrigated land, he can profitably grow fodder for the stock, paying the half value of an irrigated crop for the same, in addition to the cost of cultivation. My impression is that a stock farm cannot be profitably conducted without natural grazing, and natural grass would not outlast the rains—for say one-fourth or one-third of the year.

11. I do not think that a sheep farm would pay by stall-feeding, it does not pay in Madras—and if tried here, there is the prohibitive charge by railway to be added.

12. The good mutton of Coimbatore is not that of the indigenous long-wooled diminutive sheep, which gather their scanty subsistence from pasturing on chance fallows, but it is that of the red Carnatic, or Salem, coarse-haired sheep, which is home-fed.

13. The white-wooled grass-fed sheep is sold at the price of goat's flesh, and is not in repute.

14. I do not think horses could be bred to any profit; when fit for sale, if they survived, they would cost in feeding more than they could be bought for elsewhere. They would, like sheep, not find grazing, and there is no sufficient natural command of water to grow green fodder.

15. The loan of one or two young, large-boned, powerful galloways would do more to improve the weedy native pony, but the horses must not be old, or ineffective, as the two last tried were, whose services were, at last, declined. If a country is suited for breeding horses, it will generally be found that horses are bred; if not suited for breeding, they degenerate. It would be cheaper to buy an imported Burmah pony than to try to breed one; the climate there is good for pony-breeding, whereas here there is insufficient pasturage.

16. TOBACCO.—Mr. Mackenzie states that the tobacco grown near Pollachy is inferior. I have tried tobacco growing, and found that a lime-stone soil, with very heavy manure, produced a large fine leaf; the soil at Pollachy is a sandy loam. I tried a better red-loam soil at Coimbatore; the leaf was as large, but coarse, and was sold for Malabar use, where it is shewed.

17. CORRON.—The neighbourhood of Pollachy is not adapted for cotton; cotton is grown where it is known to succeed, and that is on the heavy black soils; but there is a good way to the east of the proposed farm.

18. I am not aware of any place where cotton, tobacco, green crops, mulberry, together with horse and sheep-breeding, can be carried on in one block. The climate of Pollachy is, at the present season, exceptional; the western parts of it near the Cusbah have green rain-fed crops, while all to the east is uncultivated for want of rainfall, which does not extend much to the east, beyond the town of Pollachy; so far, it has a partially Malabar climate for three months, and may be said to be "exceptional."

19. My own opinion is that the scheme of a farm, to pay its expenses, may be given up for this district. I can foresee nothing but financial loss, and little prospect of imitation, under such circumstances; but, if the scheme is to be persisted in, I shall at once inquire about the price to be paid for the land. I don't think it will be less than Rupees 5,000, while it is not calculated to raise any but very inferior crops, unless at a large expenditure for well-sinking, which, moreover, involves risks in finding springs and in coming on solid rock.

20. To sum up:—

The distinct objects at which Government aim are epitomised as follows:—

(1.) To ascertain by experiment the proper use of rotation in crops in this country. (In this district such rotation as is possible and profitable is well understood).

(2.) To introduce the system of root, or green crops, instead of fallow without artificial "irrigation."

In this district, the land that could produce a root or green crop is fallow, in consequence of the want of water. No root, or grass, or crops of any kind, could therefore be grown in such a case.

(3.) To introduce new crops.

(4.) To provide new kinds of seed.

(5.) "To make experiments in the use of water for the irrigation of crops now termed 'dry' crops, and for raising grasses and other crops to be used as fodder."

What are termed "dry crops," such as tobacco, and certain cereals, raggi, cholam, &c., are already extensively, in fact generally, cultivated with the aid of wells; when such exist the experiment, therefore, would not be new, and all "paying" cultivations are known. The ryots will not go to the expense of watering "fodder" crops; water is too expensive, and can only economically be bestowed on more valuable and higher priced cultivation, such as cereals, vegetables, and tobacco.

(6.) "To make experiments in the use of lime and 'other' manures;" the soil is nearly lime, and not such as can be improved by addition of that element. Human manure the ryots will not handle.

(7.) To introduce new and improved implements of rural labor; the ryots will not pay for an English plough, neither can their cattle draw one.

(8.) To improve the working cattle, sheep, horses and other varieties of live-stock. The ryots will not follow any course pointed out to them, unless there is both a manifest saving, and also an absence of preliminary expense; no improvements can be suggested that do not involve expense, and the ryots are too poor to incur it. They have no margin of money;

they just live by their land, and by their labor put into it, and no more. The Madras Farm, where water is near the surface, and climate moist, is carried on at a financial loss; the products do not pay the expense.

In Mr. Sim's Minute, he says: "If the system pursued be beyond the ryot's means, the example cannot be followed, and a number of Show Farms, maintained at the expense of the State, will be the only result."

21. To save Government, or rather the Pound or Local Funds which are indented on, this inevitable expense, I could offer 40 acres of land in the Municipality of Coimbatore, supplied with ten wells, eight of these having an improved water-lift. This land is all improved, and planted with cocoanut: 8 acres are under guinea-grass, $\frac{1}{2}$ under lucerne and China sugar-cane, $4\frac{1}{2}$ under cotton, $1\frac{1}{2}$ under mulberry and $10\frac{1}{2}$ under tobacco.

The farm resembles a congeries of small ryots' holdings—8, 6, 2 and 3-acre lots, with one or two wells to each. These petty sewage farms are just the thing to teach the ryot the use of the only new manure he is ever likely to get. I do not say that the example will be, at all, followed; but at any rate, there will not be the financial loss of the farm if tried elsewhere. There would be a market for green fodder—in waterless Coimbatore, it being consumed by the conservancy bullocks; there is also a demand for improved tobacco, and silk—every thing is ready prepared. Improved instruments are at work, viz., ploughs and digging forks. If a good Overseer was appointed, the Superintendent of the Government Farm or his Assistant, in a night's journey, could pay an occasional inspection; and the farm would be visible to all visitors to Coimbatore, and not merely to chance passengers to Pollachy.

22. I throw out the suggestion, if saving of expense is any object, and mention the fact, to show that the people have already an opportunity of seeing the possible improvements* proposed to be introduced:

* Tobacco, Cotton,
Green-fodder, Mulberry.

FORWARDED through the Superintendent of Government Farms for early transmission to the Board of Revenue, with remarks.

(Signed) A. WEDDERBURN.
Collector.

ENCLOSURE No. 2.

From G. MACKENZIE, Esq., Acting Head Assistant Collector, to A. WEDDERBURN, Esq.,
Collector of Coimbatore, dated Oodumulpettah, 7th August 1876, No. 116:—

I HAVE the honor to reply to your endorsement, No. 547, on Board's Proceedings of the 7th June.

2. In looking for a site for the model farm near Pollachy, I have not been able to keep in view all the objects given in paragraph 9 of G. O. of 22nd September 1871. That part of the district does not grow much tobacco, and that is grown is of inferior quality. There can be little or no market for butcher meat. A few Mahomedans only live in Pollachy. The small fields fenced with euphorbia-hedges would not be suitable for raising horses or sheep, and, moreover, as Pollachy is opposite the Palghat gap, the west wind would be very trying to young stock after the hot weather in each year. I have seen, in the month of May, the west wind, damp and cold, blowing with strength sufficient to tear out of the ground the young stalks of cholam. As for lime, there is abundance of nodular lime-stone (kunkur, to be found all round Pollachy).

3. In silk and tobacco, the Coimbatore Municipality has anticipated the model farm. There are now about thirty healthy young mulberry trees in the garden of the Poligar of Samattoor, and mulberry cuttings have been sent to that garden and to Ootocooly from the Coimbatore Municipality's garden.

4. There is no suitable piece of waste land to be found near Pollachy. The ground is entirely under cultivation, except in parts within the fever range under the Annamallay Hills, and in places on the Malabar frontier. The obvious objections to taking up a site there are that very

few Tamil ryots ever go to that corner of the district, and that the success of the farm would be attributed to the Malabar rainfall and not to any improved methods.

5. This is an idea that ought not to be put aside. In this district, at the present time, one is inclined to say that rainfall is everything and improved methods almost nothing. The day before yesterday I was near the Malabar frontier, and the eye was gladdened by a magnificent expanse of green cultivation. To-day, in Oodumulpettah Taluq, only five and twenty miles eastwards, one can see nothing but dust and a desolate waste of parched country. Hardly any rain has fallen in this taluq for nine months past, and the best agriculture can do nothing in these circumstances. This is what makes it difficult to select a site for a model farm. If it is not favored by climate, the farm will be a failure; and if favored by climate, the rainfall will get the credit of any success.

6. The site I selected lies about five miles south of Pollachy and adjoins the road leading direct to the Annamallay Hills. On Atlas Sheet No. 62 is marked a small tank between the villages of Samattoor and Somanthory, lying parallel to the Palar river. The site is at the south end of this small tank, and extends from the river to the road. A rough sketch is enclosed. It is not drawn to scale.

7. This small tank is fed by a channel which runs from an anicut thrown across the Palar, at a spot between the villages of Thoraoor and Upilianoor. The proposed site includes irrigated fields under the tank, fields in the bed of the tank classed as wet, pasture in the tank bed, and dry fields above the tank. There is a well in these dry fields. The supply channel flows through these dry fields. There is a cart-road from the east which passes through these fields to the main road. The site is in many respects well adapted for experimental cultivation.

8. There are three drawbacks to this site. It is five miles south of Pollachy and would not be much in the way of ryots. A glance at the map shows that the water in the Palar is dependent on the rainfall on a very limited extent of the Annamallay Hills, the extent between Mandap and Poondy. In some years this fails. The third drawback is that about 50 acres of wet land under the tank are held on putta by the Poligar of Samattoor, at present a Ward of the Court. The Collector, as manager, has legal power to lease these lands from year to year during the minority. The Poligar will come of age in 1879.

9. The site forms part of the lands of the Government villages of Somanthory and Kariyanchetty palayam. The 50 acres mentioned above are held on putta by the young Poligar and do not form part of his Poliput. Portion of the site is held by Chittoor Ramasawmy Moodelly, a well-known ryot, who lives in the immediate neighbourhood. The Puttadars will not sell their land but have given a general consent to lease it for a term of years. I have taken no formal agreement from them. Their terms are very high. For wet lands they ask Rupees 30 per annum per acre, and for dry lands, according to the estimated yield of the soil, which is about two pothies or Rupees 24* per bullah.

* Note.—Rupees 6 per acre.

The trees on some of the fields were taken into account. The total rent will be Rupees 2,262-8-0 per annum for Acres 169-69.

10. The enclosed statement marked A shows the extent and other particulars. Out of the Acres 70-70 classed as wet, about 56 are under the tank, and about 15 are in the tank bed, and at present bear a crop of cholam. The Acres 98-89, classed dry, are at present under cholam, or left fallow for pasture.

11. Another site for a farm was shown to us by Chittoor Ramasawmy Moodelly, about three miles north-east of the town of Annamallay. The soil is very good, and the site in many respects admirable; but as you remarked that the situation between two rivers without bridges was an insuperable objection, I have done nothing more in regard to that site.

12. If the site near Somanthory is considered too far out of the way, I would recommend fields close to Pollachy, which can be seen by all the ryots coming to that town. With this view, I have prepared a rough sketch of the fields lying in the angle of the Coimbatore and Palghat roads, adjoining the compound of the bungalow I at present rent from the London Mission. The whole block of fields comprises an area of Acres 219-84 dry land. It is undulating land, and is partly

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144 Local Board of Revenue, 1876

Dec. 1876. 29th
Board of Revenue,
MADRAS

PROCEEDINGS, 23RD NOVEMBER 1876, No. 2,033.

29th Dec 1876

Encl.

Received 6 Dec.

NOVEMBER.
No. 2,033.

Experimental Farm—in Coimbatore.—Stating that proposal to establish an — should be heard for the present, and requesting Collector of Coimbatore to select, in consultation with Superintendent of Government Farms, a suitable site in his district for the purpose.

With order

No. 669 January 1877

C/12.12.76 M/15-1236

No. 66

The Board agrees with the Board that the proposal to establish an experimental farm at Coimbatore should under the circumstances stated be allowed —

The report of the Board of Revenue is accepted. The Board is satisfied that the proposal to establish an experimental farm at Coimbatore is a desirable one, and that the Board should be allowed to select a suitable site in its district for the purpose. The Board is satisfied that the proposal to establish an experimental farm at Coimbatore is a desirable one, and that the Board should be allowed to select a suitable site in its district for the purpose.

9 January 1877