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MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 2069 — Press / ~~Mis.~~

356-357

Dated 29 - 10 - 1861.

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department,
29th October 1861.

No. 356. Read the following Minute by the Honorable the President :—

MINUTE ON THE GROWTH AND IMPROVEMENT OF THE QUALITY OF NATIVE COTTON.

1. I am induced to bring under the consideration of the Council questions connected with the improvement and extension of the growth of Cotton in the Presidency of Madras, by the publication of a Resolution of the Governor General in Council, to the effect that prizes of 10,000 Rupees will be given during the years 1861-62, 1862-63 in each of the Presidencies of Fort William, Madras, and Bombay, under certain conditions made known in the proclamation. The subject of the extension of the cultivation of Cotton in the British Colonies has been under my consideration for many years past. In Australia various attempts were made to introduce the finer species of American Cotton, and, so far as the quantity and quality of the Cotton was concerned, these attempts succeeded; but the high price of labor was a complete bar to the introduction of Cotton as a paying crop.

2. Since my arrival in Madras the same subject has been brought before me in various ways, at one time in the shape of suggestions for the improvement of the means of conveyance by water or Railways, for the purpose of bringing more cheaply to market the surplus produce supposed to exist in the interior; at another, as in the present instance, by proposals to stimulate the cultivation by the offer of prizes.

3. I have in consequence been led to make a variety of enquiries from persons engaged in the cultivation of Cotton, and from others, and the following are the results to which these enquiries have led :—

(1.) That the great surplus of Cotton supposed to exist in the interior of the country, and which only awaits cheaper means of conveyance to bring it to market, is the product of the imagination of those whose object it is to show that there is traffic sufficient to defray the cost of transport, as well as the interest of money invested in Railroads or Canals as the case may be.

Cotton is cultivated, and that largely, in various districts; but this is generally done by the Ryots under the stimulus of an advance of capital from a merchant or speculator, and on the security of a fixed price per pound for the crop. There is therefore little or no surplus beyond that already, so to say, mortgaged to the merchant, at a price low enough to enable him to pay all costs and charges to the port of shipment.

(2.) That the extensive districts of what is emphatically called "*Cotton soil*," though well adapted to produce "Native Cotton," which is short in the staple and strong, not to say coarse, in the fibre, is not congenial to the growth of the fine species of American Cotton. This kind of Cotton I know, from experiments in Australia, to flourish in a light sandy loam, and am told that similar results have obtained here. The "Cotton soil," which is an adhesive black clay, almost of the consistence of birdlime, when thoroughly wet, dries into the consistence of a brick, but crumbles under the action of the sun and slight showers into a light powder. In the dry season this soil cracks deeply, showing, by the amount of shrinkage when the water evaporates, that it contains a very large proportion of clay. The experiments which have been made on the cultivation of the American Cotton on this soil have hitherto been unsuccessful. That there are soils in which these Cottons can be grown is very probable. In the red soil of Coimbatore Bourbon Cotton is grown to some extent, and it is possible that other sites may be found where the Upland or New Orleans Cotton may be grown with advantage.

4. With a view then to the development of the Cotton-producing powers of India, generally, by which the English manufacturers might be relieved from their present dependence upon the supply from America, two courses appear to present themselves—

(1.) The encouragement by every means of the introduction of the better species of American Cotton.

(2.) The improvement of the Native Cotton, by increasing the length of the staple, and lessening the coarseness of the fibre. Attention paid to the last of these two schemes would be likely to yield results more profitable to the cultivator, and more advantageous to

the manufacturer, than any which would result from the cultivation of American Cotton. In the first place we know that there is a large extent of soil well fitted for the cultivation of this particular species; that little encouragement will be required to induce the Ryot to cultivate it upon this soil; that any rise of price contingent upon the improvement of the quality of the Cotton, unaccompanied (as will be the case) with any increase in the cost of cultivation, is to the direct advantage of the Ryot, and will do much to stimulate production; on the other hand the cultivation of the American Cotton must be at first an experiment; it is known to be a precarious crop, and the better the quality and the higher the price the smaller is the yield per acre.

5. While however I am inclined to advocate the improvement of the Native Cotton as the most profitable crop, I am by no means disposed to check attempts to acclimatize the better descriptions, and I will now proceed to describe, first the process by which it is probable that the Native Cotton can be improved, and secondly the steps which it would be desirable that the Government should take to encourage a series of experiments in various parts of the country, partly with a view to the introduction of new species of Cotton, partly with a view to the improvement of the indigenous species. I must premise that the mode of improving the Native Cotton has been suggested by the Marquis of Tweedale, who explained the process to Mr. Thomas the Collector of Coimbatore in a letter which that gentleman communicated to me.

6. The process is as follows: From the seed pods of this year's crop take out those seeds to which the largest fibres are attached, establishing a minimum length of fibre, and throwing away all those seeds the cotton of which does not reach this standard; these selected seeds will be used for the next crop, and a similar process will be followed with this, the minimum length being increased every year. In this way in the course of a few years it is probable that a permanent addition will be made to the length and possibly to the fineness of the fibre, and it will then be easy to spread the seed of the improved kind over the whole of the indigenous cotton fields of India.

7. In the Resolution of the Governor General in Council to which allusion has been made, a former Resolution of 28th February is referred to, in which the following principle is laid down:—

"That no measure which places Government in the position of the private capitalist, or cultivator, "or speculator, or which in any way interferes with private enterprize can be otherwise than "permanently injurious in itself and detrimental to the object in view.

"Therefore all attempts to stimulate cultivation or labour by any exertion of Government "authority, directly or indirectly, are out of the question."

"The same objection will apply to model farms and experimental cultivation conducted by "Officers of Government."

8. Approving generally of the principle laid down, though perhaps I might demur to some of the deductions if carried out generally, I will now explain the mode in which I propose that the Government should act to encourage the experiments detailed above, as well as those which have for their object the introduction of the better qualities of Cotton.

9. The object being to improve the quality of the Cotton grown on what is called the "Cotton "soil," I should propose to allow to a few intelligent Natives in different parts of the country who may be willing to undertake these experiments, a remission of all assessment upon a certain quantity of land, not exceeding, say, 30 acres in extent, for a period of five years, upon condition that this land should be devoted to Cotton cultivation, and that an annual return should be made to the Collector showing the area under cultivation, the cost of cultivation, the amount of the crop, &c., &c., and that this should be accompanied by a sample of the crop showing all the varieties of Cotton grown.

10. In addition to this a reward should be promised to all who at the end of the five years should be able to show that the produce of their land was superior in value, taking quantity and quality into consideration, to that of similar land under Cotton cultivation, and this reward should be made in some measure proportionate to the improvement in the quality of the Cotton, whether this be the result of a change in the quality of the native Cotton, or of the introduction of a superior species; in fact it might almost be made proportionate to the price of the Cotton sent to market; and as in the present instance the Governor General in Council has not hesitated to offer a

reward of 10,000 Rupees in a single prize, I do n[ot] think that there ought to be any hesitation in establishing a gradation of prizes varying from 1[0]0 to 5,000 Rupees according to some scale to be hereafter determined, the highest premium bein[g] given to the successful cultivator of Cotton, whose value per pound and the value of the c[rop] per acre should not be less than the sums determined on.

(Signed) W. T. DENISON.

I concur in t[his] Minute.

(Signed) W. MOREHEAD.
(„) E. MALTBY.

No. 357. ORDER THEREON 29th October 1861, No. 2,069.

1. Resolved that the above Minute be co[m]municated to the Board of Revenue in view to their giving effect to the experiments proposed i[n] paragraphs 5, 6 and 9. The experiment will be tried at once on the crop of the current year, an[d] the approaching settlement will probably be a convenient time to carry out the arrangements, as it will admit of the Collectors, their Assistants and Deputies personally explaining the na[ture] and scope of the experiment. It should be particularly pointed out that the improvement o[f] the indigenous Cotton has this great advantage that with no greater labor, expense or risk, the [crop] will realise a higher price and be adapted to the requirements of the English as well as H[ome] Market. But the experiment must be tried *bonâ fide*, and unless the people cordially and ho[n]estly co-operate with the Government, success cannot be hoped for. It will need care on the p[art] of Collectors to select the persons to whom the experiment shall be entrusted.

2. The prizes propose[d] in paragraph 10 [will] be arranged by the Board after communication with such Collectors and persons practically interested in the Cotton trade as they may wish to consult, and a detailed report will then be submitted to Government by the Board.

(Signed) J. D. SIM,
Secretary to Government.

Minute on the growth and improvement of Quality of Native Cotton

I am induced to bring under the consideration of the Council questions connected with the improvement, and extension of the growth of Cotton in the Presidency of Madras - by the publication of a Resolution of this Govt in Council, to the effect that Rupees of the value of 10000 £ will be given during the year 1861-62 rewards in each of the Presidencies of Fort William Madras & Bombay - under certain conditions made known in the proclamation - The subject of the extension & the cultivation of Cotton in the British Colonies has been a sundry considerations for many years past. In Australia various attempts were made to introduce the finer species of American Cotton, and, so far as the quantity & quality of the Cotton was concerned, these attempts succeeded, but the high price of labour was a complete bar to the extension of Cotton as a payable crop.

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the cultivation by the offer
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I have in consequence been
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of Cotton, and others, and
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have led -
1st That the great surplus
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2nd - That the extensive
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produce "Native Cotton"
which is short in the staple
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Cotton - This kind of
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results have obtained here
in that "Cotton soil"
which is an adhesive
Black clay, deficient in
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when thoroughly wet -
drying into the consistence
of Brick - but crumbling

under the action of the sun & slight showers into a light powder. in the dry season the soil cracks deeply, showing by the amount of shrinkage when the water evaporates that it contains a very large proportion of Clay. No experiments have been made on the cultivation of the American Cotton in this soil hitherto been unsuccessful. What then are soils in which this Cotton can grow in any probability. In the red soil of Carnatic Bourbon Cotton is grown to some extent. and it is possible that other cotton may be found which the Uplands or New Orleans cotton may be grown with advantage with a view then to the development of this cotton producing power of India, primarily by the English Manufacturer may be derived from the present dependance upon the supply from America. two courses appear to present themselves

1st The encouragement by every means of the introduction of the better species of American Cotton -

2nd The improvement of the Native Cotton. by increasing the length of the staple - and lessening the coarseness of the fibre.

Attention paid to the latter two schemes would be likely to yield results more profitable to the Cultivator, & more advantageous to the Manufacturer than any which would result from the cultivation of American cotton -

In the first place we know that there is a large extent of soil well fitted for the cultivation of the Bourbon species - that little encouragement would be required to induce the Ryot to cultivate it upon his land -

That any rise of price contingent upon the improvement of the quality of the cotton, in accordance with (as well as the cause of) the increase in the cost of cultivation is the greatest advantage of the

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on the other hand the culti-
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native cotton can be im-
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that the Govt should take
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of this country partly with
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Mr. Thomas Publisher of
Coimbatore in a letter which
that Gentleman communi-
cated to me —
The process is as follows.
Pick from the seed Bolls of the pure
crop take out those seeds to
which the longest fibres are
attached - establishing a
minimum length of fibre,
and throwing away all those
seeds the cotton of which does
not reach this standard —
Next year these selected seeds will
be used for the next crop
and a similar process will
be followed with this, this
minimum length being
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this way in the course of a
few years it is probable that
a permanent addition
will be made to the length &
consequently to the fineness of
the fibre - and it will then
be easy to spread the seed
of the improved kind over
the whole of the Indigenous
Cotton fields of India —
In the Resolution of the Govt
Genl in Council to which allusion
has been made a former
resolution of 28th Feb is
referred to in which the following
principles were laid down.
"That no measure which places
"Govt in the position of the
"private Capitalist Cultivator

or Speculator, or which in any way interfere with Private enterprize can be otherwise than permanently injurious & detrimental to the Colony in a Pecuniary point of view -

Therefore all attempts to extend cultivation or labour by any exertion of Govt authority directly or indirectly are out of the question -

The same objection will apply to model Farms and experimental cultivation can only be decided by Officers of Govt -

Approving generally of the principle laid down in the above, though perhaps I might demur to some of the deductions of carried out generally. I will now explain the mode in which I propose that the Govt should act to encourage the experiments dictated above - as well as those which have for their object the introduction of improved & the better qualities of Cotton -

The object being to improve the quality of the Cotton grown in which is called the "Cotton Land" I should propose to allow a few intelligent Natives in different parts of the Country

N.O

who may be willing to undertake the experiment, a remission of all assessment upon a certain quantity of land, not exceeding say 3 Acres in extent, for a period of five years - upon condition that the land should be devoted to Cotton cultivation, and that an annual return should be made to the Collector accurately showing the Area under cultivation - the cost of cultivation - the amount of the Crop - &c &c and that the same should be accompanied by a sample of the Crop showing all the varieties of Cotton grown - In addition to this a reward should be promised to all who at the end of the five years should be able to show that their produce of their Land was superior in value, taking quantity & quality into consideration, to that of similar land under Cotton Cultivation - and this reward should be made on some measure

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In fact it must almost
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not hesitated to offer a
reward of 10000 Rupees
as a simple prize I do not
think that this ought
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establishing a gradation
of prizes ranging from
1000 Rupees to 5000 Rs
according to some scale
to be hereafter determined,
the highest premium
being given to the successful
cultivator of Cotton whose
value per lb should not
be less than and
its value per Acre after
deducting cost of lb shall

Stewart in his
Memorandum

Etc

R. D.

No. 2069.

Proceedings of the Mad.as Govt
Under date the 29th Octr. 1861.
Read the following
Minute by the Honble
the Presidt —

On the growth
and improvement of
the quality of Native
Cotton. —

Where enter

Resolved that
the above Minute
be communicated
to the B.d of Reve-
nue in view to their
giving effect to the
experiments pro-
posed in paras 5-
6 and 9- The ex-
-periment

Rec.d 18th Decr. 1861
& Reg.d for Report
No. 3107

Minute by the President

Dated 29th Octr. 1861
Recd 3rd Novr. 1861

Bowring Rio
Points out the growth
and improvement of
Quality of native cotton.

No. 2069.

Read 4th Decr. 1861

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2/ The prizes proposed in para 10 will be arranged by the Bd. after communication with such Colls. and persons practically interested in the Cotton trade as they may wish to consult, and a detailed report will then be submitted to Govt. by the Bd.

JRM

M.S. Copy to Mrs Dounds of Mr
" M. Thiruvalangadu Pillai
Printed Copies to do & 3rs

Copy in a Letter to England
dated 4th March No: 10 of 1862

313/1

Experiment on
Cotton.

Revenue 1861 Defiant
Pro: of Govt for October
No: 2069

Pro: of the Madras Govt.
Dy 29th October 1861.

Pro: of the Board of Rev dy
24 Sept 62 c No: 2713
Pro: Bd of Revs dated 11th January
1865 c No 14
Pro: Board of Revenue dated 16th
August 63 c No 2285
Forwd 20th Oct 68 c No 3397

Communicating to the
Board of Revenue the Honble
the Presidents Minute on the
improvement of the Indigenous
Cotton of India.

No 356 & 357