

Educational (1895) Department.

ORDINARY MS.

G.O., No. 464

Dated 5th June 1895

INDEXED.

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27

[Despatch Abstract.]

COLLEGE OF AGRICULTURE.

Requesting the Director of Public Instruction to
appoint a committee to consider and report on the question
of revising the syllabus of the --.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
C	1207		95				

REVENUE DEPARTMENT.

1895.

Board of Revenue

(Revenue Settlement, Land Records and Agriculture),

MADRAS.

Current Number 1691

741: 10-10-93 S.C.

44: 759-8-10-94 S.C.

450-12-6-94 S.C.

746-13-11-93 S.C.

633-1-9-93 S.C.

Printed February th. 333-16-5-93 S.C.
Recd 2 Mar.

Encl. 3

Proceedings, 13th February 1895, No. 33.



Awaiting return from
Circ. & reply
Recd 10/3.

College of Agriculture.—Reviewing correspondence regarding standards adopted for certain subjects in the —.

P.T.O.

Encl.

COPIES NO. 372

Recd 10/13 Educational Dept

Endorsement No. 565 B

Transferred to
the Educational Department

W. B. L. J.
For Under Secy to Govt

Forth George J
22nd March 1895-3

Recd 23
Encl. 3

To The Educational Dept
" Board of Rev. & Sec.

18/11/95

21/3

23/3

For R
Recd 27/3/95
27/3/95

N 850.

Madras College of Agriculture,
Saidapet, 19th September/93.

From,

The Acting Principal,
College of Agriculture

To

The Director of Public Instruction,
Madras.

Sir,

I have the honor to submit my
remarks on certain matters
mentioned in your Proceedings
N 10,263, dated 14th September 1893,
(review of my last annual report).

2. Para 4. The tabular state-
ment compares the results obtained
at the examinations in 1892 with
those obtained at the corresponding
examinations in 1893. I would
point that, though the syllabuses
used on the two occasions were
practically identical, the
maxima demanded in 1893 were as
a

a rule higher for a pass than
now demanded in 1852 and
this remark especially applies to
the practical tests. The failure
in one subject (Organic Chemistry)
was undoubtedly due to my having
placed one interpretation on the
directions given in the syllabus
for the conduct of the practical
examination while the examiners
placed another interpretation
on the directions referred to. I
drew up the directions in question
but of course it is useless my
raising any objections after
the examinations are over.

3. In the same form, you request
me to state whether the time
devoted to Agricultural
Engineering and Surveying and
Leveling during the 2nd and 3rd
years' course is susceptible of any

any reduction. I beg to reply
in the negative. Agricultural
Engineering includes plan-drawing,
which necessitates long hours of
work. Surveying and Leveling in-
cludes outdoor work and also
plotting. Considering the number
of plans required to be submitted
according to the new syllabus,
I don't see how the hours de-
voted to Surveying and Leveling
can be reduced. It is the nature
of the two subjects under reference,
including as they do, a large
amount of what may be described
as more or less mechanical work,
which compels a large number
of hours to be set apart for
their study. Unless the syllabus
are altered, which I don't think
advisable, I cannot see how
the hours devoted to the subjects
named

named can be reduced. As
a matter of experience, it is
found that, while students cannot
be kept at practical work
in some subjects (Agriculture,
Botany, &c) for longer than
an hour and a half at a time,
they can go on working at outdoor
surveying, plan-drawing, plotting
&c for three or four consecutive
hours. The inconvenience to the
College, therefore, of devoting a
large number of hours to Agri-
cultural Engineering and Surveying
and Levelling is more apparent
than real.

x x x x

Para 5. Yours para 6. The explanation
regarding the decrease in the average
yield of milk is as follows:—
First. As regards the whole herd,
the following causes tended
to

to reduce the average:—

- 1st the inclusion of Kalyanee.
- II She was milking with her
first calf and could not be
expected to reach the average
of most of the other cows.
- (2) the inclusion of Sahib's
Cow No 10. The circumstances
under which this cow was drafted
into the herd are explained
in para 19 of my annual
report.
- (3) the bad milking of Gavari
No 8, which necessitated her
being sold. Vide para 19 of
my annual report.
- (4) the increase in the amount
of cattle food given. The price
of cattle food rose so much
that it was impossible to avoid
a reduction in the amount.
In April 1891 we were paying
Rupees $9\frac{1}{2}$ per candy for groundnut.

In March 1893 we paid Rupees 15½ for candy.

(5) the increased age and consequent reduced milk of some of the best cows.

Similarly dealing with the cows specially mentioned in para 4 of Board's Proceedings. Gauri should be omitted for reasons already explained. The table can be shown as follows:—

Cow	1890-91			1891-92			1892-93		
	Days	lb	lb	Days	lb	lb	Days	lb	lb
1 Kalli II	99	327	— 750	259	581	— 375	104	343	— 75
2 Kamachi	223	529	— 125	205	347	— 000	340	790	— 50
3 Subbammah	206	570	— 375	297	966	— 125	365	976	— 50
4 Kalyanee	146	466	— 875	239	952	— 000	364	1054	— 50
5 Lakshmi	340	893	— 875	312	767	— 625	205	513	— 75
6 Rukhmani	291	961	— 875	261	619	— 500	201	504	— 68
7 Meenachi	325	1120	— 375	235	648	— 625	198	430	— 00
	1680	4870	— 250	1808	4882	— 250	1777	4613	— 68

The following, I think, explains matters.

(1)

(1) Subbammah No 3 milked for an abnormally long period (365 days) and though she actually gave more milk in 1892-93 than in 1891-92, her average worked out lower in the year ends report than in the previous year. I need hardly say that towards the end of her milking period her yield was very small. As long, however, as a cow continues to give even half an Allock of milk, she is shown as milking in the College books.

(2) Kalyanee, No 4, also gave more milk in 1892-93, than in 1891-92. Her average shows a decrease for two reasons. In October 1891 when she was yielding 2 measurs 6 Allocks a day, she was seized with illness and lost her milk. Her "milking days" therefore ceased ^{increasing} ^{much}

increasing, so that the last portion of her milking period, when the yield is always lowest, did not tend to reduce her average, which it always does in the case of a cow which ceases giving milk from natural causes. Further, during 1882-83, she was in milk for an abnormal number of days which tended to reduce her average.

(3) Meenachi, no. 7 is one of the oldest cows on the Farm, if not the very oldest, and her age accounts for the reduction in her average.

On the whole, I consider that judging by averages is not to be relied on. For instance, one cow may have a milking period of 200 days yielding 500 measures of milk. Her average would be 2.5. Assuming she calved on 1st April

April, the 500 measures would represent her yield during a certain financial year. A second cow also calving on 1st April has a milking period of 300 days yielding 600 measures. This quantity would be her yield during a financial year (N.B. The interval between 2 calvings is about 14 or 15 months) and her average would be 2.0. Judging by average the first cow is the better milker whereas in reality she is not.

I take this opportunity of pointing out that the word "lb" in the 4th column of the first statement of Board's points should be "measures".

(True Entrant)
(signed) A. Menon
of Director of Public Instruction.
(True Entrant copy)

I have to
(signed) W. Kees
of Principal

Myjambalam
Secretary.

ad



Proceedings of the Board of Revenue

(Revenue Settlement, Land Records and Agriculture.)

Dated 18th December 1893.

No. 7200 Nis

READ the following letter from the Director of Public Instruction, Madras, dated 6th December/93, N 13451:—

With reference to the Board's remarks contained in paras 2 & 4 of its Proceedings, N 247 dated 22nd June/93, I have the honor to forward for information & back from a letter from the Principal, College of Agriculture, N 850 dated 19th September 1893. As regard the concluding sentence of para 2 of the above Proceedings, I beg to inform the Board that I reserve my opinion as to the manner in

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REVENUE DEPARTMENT.
Enclosure No. 1
Current No. 1691

which the Technical examinations
of April last were conducted,
pending the receipt of a further
report on the subject from the Principal.

2. With admittance to para 6 of
the Board's Proceedings under reply
I beg to state that I understand
that Dr. Duncan did not consider
it necessary that the College
and the Farm annexed to it
should be periodically inspected
and reported on by the Agricultural
Department. I defer giving my opinion
on the question, until I have seen
more of the working of the College.

Resolution

Recorded.

2. The suggestion made in para 6
of Board's Proceedings, 22nd June/93
No 247, only referred to inspection
of the farm, regarding the
working of which it is scarcely possible
to

To give a complete and accurate
view in an annual report.

/True Copy & return/

(signed) P. Rajaratnam
Secretary

To the Director of Public Instruction.

(True Copy)

P. Rajaratnam
Secretary

Exad

PROCEEDINGS OF THE BOARD OF REVENUE
(REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

READ—again the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 11th December 1894, Mis. No. 7540 :—

Read—the following letter from the Hon'ble D. DUNCAN, M.A., D.Sc., Director of Public Instruction, Madras, to the Secretary to the Commissioner of Revenue Settlement, Land Records and Agriculture, dated Madras, 5th November 1894, No. 10634 :—

With reference to paragraph 2 of the Board's Proceedings, No. 308, dated 30th July 1894, I have the honour to invite the attention of the Board to Mr. Monro's letter, No. 13151, dated 6th December 1893, communicating Mr. Walter Keess' views regarding the time devoted at the College of Agriculture to instruction in Surveying and Levelling and Agricultural Engineering. I would add that Mr. Keess still adheres to the opinion then expressed.

Resolution—dated 11th December 1894, Mis. No. 7540.

Recorded.

2. During the last two years, the time devoted to the two subjects under reference has been as follows :—

Subjects.	Class I.				Class II.			
	1892-93.		1893-94.		1892-93.		1893-94.	
	Lectures.	Practical.	Lectures.	Practical.	Lectures.	Practical.	Lectures.	Practical.
1	2	3	4	5	6	7	8	9
Surveying and Levelling ..	35	97	..	102½	70	232	..	141
Agricultural Engineering ..	..	..	..	..	29	..	29	..
All subjects ..	456	424½	382	423	446	474	347	394

Subjects.	Class III.				Total course.			
	1892-93.		1893-94.		1892-93.		1893-94.	
	Lectures.	Practical.	Lectures.	Practical.	Lectures.	Practical.	Lectures.	Practical.
	10	11	12	13	14	15	16	17
Surveying and Levelling ..	..	212	..	60	105	329	..	243½
Agricultural Engineering ..	..	..	..	119	241	..	89	119
All subjects ..	471	216	352	353½	1,373	1,114½	1,081	1,170½

The annual reports of the College show also that the above figures do not fully represent the time devoted to these subjects by the students, whilst the division of the time between lecture-room and practical work is admittedly approximate only.

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REVENUE DEPARTMENT
Enclosure No. 2
Current No. 1691

3. It appears to the Board that to devote the time of upwards of forty full working days to a subject of such subsidiary importance in an agricultural training as Surveying and Levelling is inadvisable, and that if, on the present syllabus, this is found necessary, it should be considered whether the syllabus cannot be simplified.

(True Copy and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Director of Public Instruction.

READ—also the following letter from the Hon'ble D. DUNCAN, M.A., D.Sc., Director of Public Instruction, Madras, to the Secretary to the Commissioner of Revenue Settlement, Land Records and Agriculture, dated Madras, 28th January 1895, No. 803:—

With reference to Proceedings of the Board of Revenue, Mis No. 7540, dated 11th December 1894, I have the honour to forward, for the information of the Board, the enclosed copy of a letter from the Acting Principal, College of Agriculture, No. 1056, dated 17th idem, and to state that, after perusing the arguments put forth by Mr. Keess, I am inclined to the opinion expressed by him, viz., that it is not desirable at present to reduce the time devoted to Surveying and Levelling at the College.

ENCLOSURE.

From W. KEESS, Esq., Acting Principal, College of Agriculture, to the Director of Public Instruction, dated Saidapet, 17th December 1894, No. 1056.

With reference to your endorsement, No. 12235, of the 15th December, on Board's Proceedings (Revenue Settlement, Land Records and Agriculture), Mis No. 7540, dated 11th December 1894 (herewith returned, as requested), I have the honour to state that, so long as the present syllabus in *Surveying and Levelling* is in use at the College, no reduction in the time devoted to the teaching of that subject is practicable. No doubt the syllabuses in all the College subjects, including *Surveying*, will require periodical revision, for experience will show their weak points, but as far as matters have gone at present, I don't think the syllabus in *Surveying* needs alteration.

2. I am willing to acknowledge that at first sight the time devoted to *Surveying and Levelling* appears excessive, but when the nature of the subject is considered, this objection vanishes. A great deal of the work (such as out-door surveying, plotting, &c.), may be described as to a great extent mechanical and, such being the case, must occupy long hours. What, however, should be considered is not the number of hours shown in the annual report as devoted to the teaching of a certain subject, but the demand made on the students' time in mastering that subject. In some subjects (viz., Agricultural Chemistry, Agriculture, Botany, Materia Medica, Anatomy, &c.), a certain lecture lasting an hour may entail ten or more hours of private study on the part of a student at different times of his career, whereas a plan-drawing class may occupy three hours, but there is no further demand on the students' time. Again, the mental effort required on the part of students during the hours devoted to different subjects must be considered. There is no comparison between the mental effort put forth during a given time devoted to one of the subjects enumerated above and that put forth during the same time devoted to out-door surveying or plan-drawing. After three lectures in the forenoon I should not hesitate about making a student spend three hours in the afternoon in plan-drawing; whereas I would never, under any circumstance, make him instead undergo three lectures on certain subjects. The inconvenience to the work of the College in having long hours devoted to *Surveying and Levelling* is not such as to call for any remedy. I think you will agree with me in saying that inferences drawn from a tabular statement of hours devoted to teaching dissimilar subjects are likely to be misleading.

3. I consulted the Instructor of *Surveying and Levelling* (M.R.Ry. Subramaniya Aiyar, B.C.E.) on the point and his proposals are as follow:—

First.—The submission of plans should not be required, but the practical examination should be extended so as to include plan-drawing. I am altogether opposed to this being done.

Second.—The syllabus should be extended so as to include the special work required of Revenue Inspectors (*vide* Board's Proceedings, No. 379, dated 14th September 1894). If this can be done, and if the Board will then accept a pass in the syllabus in lieu of the special

training prescribed for Revenue Inspectors, I think this proposal might be seriously considered; but if these officers are in any case to undergo further training, I am opposed to M.R. Ry. Subramaniya Aiyar's second proposal, on the ground that it will, if adopted, increase the work in surveying without any corresponding advantage.

RESOLUTION—dated 13th February 1895, No. 33.

The correspondence read above will be submitted for the information of Government.

2. This correspondence arose from a remark made by the Board, in paragraph 2 of its Proceedings, dated 30th July 1894, No. 303, reviewing the report of the College of Agriculture, to the effect that "an amount of time disproportionate with importance of the subjects is taken up in teaching Surveying and Levelling and Agricultural Engineering." The Board had in its Proceedings, dated 22nd June 1893, No. 247, previously suggested that the standards in those subjects were pitched

too high, but the Director of Public Instruction * did not favour it with any remarks of his own on the subject. The matter was then, however, before Government, and in its Proceedings, dated 29th August 1893, No. 361, the Board had drawn attention to this point. In its

orders † regarding the re-organisation of the College, the Government did not, however, allude to this matter, and the Board therefore considers it advisable that it should now be fully considered.

3. The reports of the Examiners at the Government Technical examinations show that there is ample room for the improvement in the practical training of the students in Agriculture, which, the Board would point

o, the Government ‡ has insisted on as being necessary. Most of the work for this purpose must be to a great extent mechanical, and will demand a large amount of time. It is pointed out by Mr. Keess that a great deal of the work in Surveying and Levelling is of a similar character, and demands a great deal of time also. Although the Board admits that the standard of the examination in such a subject will vary according as the Examiner be an Engineer, or a Surveyor, the scope of the syllabus in Surveying and Levelling at present prescribed appears to be more extensive than is required to qualify any student for such work as would fall to a subordinate employed in the Land Revenue Department, or on any large estate, whilst much of it may be regarded as introductory to the other subject alluded to—Agricultural Engineering. Although the scope of the syllabus for examination is as described, the Board (acting on the advice of the Superintendent of Survey, on the ground that further training is required to learn practically the method of preparation and use of Revenue Survey records) has laid down that passing in Surveying and Levelling shall not exempt a Revenue Inspector from the necessity for going through a further special training in Surveying.

4. Under the orders quoted above for the re-organisation of the College, it is to be expected that a large proportion of the successful students of the College will in the future enter the Land Revenue Department, and it is advisable either —

(1) so to modify the test as to overcome the objections of the Superintendent of Survey to it as a qualification for employment as Revenue Inspector; or

(2) to circumscribe the test as closely as may be possible, with a view to more time being set at liberty for practical agricultural training.

It appears to the Board, however, that both these objects may possibly be attained by a careful revision or recasting of the syllabus, or by revising the syllabus in Agricultural Engineering so as to include thereunder all the Surveying and Levelling necessary. It would therefore suggest that the Commissioner for Government

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4 BOARD OF REVENUE (REV. SETT., L. RDS. AND AGRI.), 13TH FEB. 1895, No. 33.

Examinations may be requested to form a committee with this object, on which the Board would suggest that Mr. Cardozo and Major Love, R.E., may be requested to serve. Major Love was a member of the special committee whose report was read in Board's Proceedings, dated 29th August 1893, No. 361, and was one of the framers of the present syllabus in Agricultural Engineering. Perhaps, also, it might be advisable to associate the present Examiner in the subject on the committee.

(True Copies and Extract.)

Signature
Secretary.

To the Secretary to Government, Revenue Department,
with copy of Board's Proceedings, Mis. No. 7200 of 1893.
Director of Public Instruction.

Exd. A. Grubert.

[G.
25.]
600-8-3-05.

Ed DEPARTMENT.

C. No. 372 of 95

FOR ORDERS.

The Board seems to
make out a good case
for raising the syllabus the
Director should be asked to
appoint a committee.

JS
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Order of 5th June 1895 No. 464

The Govt. considered that the Board
of Revenue has made out a good case
for the revision of the syllabus of the
College of Agriculture & the D.P.I.
will accept. be requested to appoint a
committee to consider and report on
the question.

The D.P.I. (A. 100) 11/5/95
The Board of Revenue (P. 100) 27.5.10 JUN 95
IN M.S.

apparently because it was thought
unadvisable to change the curriculum
of the College at a time when its future
was uncertain, & after so many recent
changes.

The Board of Rev. seems to
think that the standards up to
which Surveying, Levelling and
Agricultural Engineering are
taught in the College of Agriculture
are pitched a little too high and
considers that an amount of time
disproportionate with the importance
of these subjects is taken up in
teaching them. The Bd points
out that it drew attention to
this point in its Pro. of 29th Aug
93 no 361 but that Govt made
no allusion to it in its order
of the 22nd June 94 no 460 Ed.
This is not however correct;
Govt considered the matter but
decided not to say any thing
about it. Please see the note for
orders in the original of G.O. of 22nd

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June 94 no 480 Ed. at the place
marked with red tape,

The Board considers that the
matter should now be fully consi-
dered. It appears to the Board
that the scope of the Syllabus in
Surveying and Levelling is more
extensive than is required for a
Subordinate of the Rev. Dept; but
in spite of this it has ruled that
passing in Surveying and Levelling
shall not exempt a Rev. Inspector
from passing the Survey Test pre-
scribed in G.O. & 8th July 1885 no
600 Rev. (vide Bd's Pro. & 14th Sept
94 no 379 in the vol. put up).

The Board therefore considers that
the Syllabus in Surveying and
Levelling should be so modified
as to overcome the objections of the
Suplt. of Survey or circumscribed
as closely as possible with a view
to more time being set at liberty
for practical Agricultural train-
ing. The D.P.I. and the Principal
of the College of Agr. have already
expressed their opinion that it
is not desirable at present to
re-see the time devoted to ~~the~~
Surveying and Levelling, in their

& H.M. & remark
against it
2
6.5

FOR ORDERS.

* if orders are passed on the
linked current directing that
a class be formed for the
training of Revenue inspectors

letters printed in the Bd's Pro.
The Board does not agree with
them and requests that the Comm.
for Govt Exams. may be directed to
form a Committee to consider
the question of revising the Syllabus
and that Mr. Cardozo, Major Lane
and the present Examiners in Sur-
veying & Levelling may be re-
quested to serve on the Committee.

This is a question affecting the
College of Agriculture and the
D.P.I. is the proper person to
appoint the Committee. Moreover
the revision of the Syllabus of the
Technical Examinations has
usually been done by the D.P.I.
(vide G.O. & 20th January 1893 no 32 Ed.)
If it is thought that the question
raised by the Board may well be
considered, one and the same
Committee may be asked to consider
the question of ^{the} training in Agr.
to be undergone by candidates for
the post of Rev. Inspector & this.

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Surveying and Levelling for Agricultural Students.

H.M.

(For orders)

When given for copying _____
When copied _____
When examined _____
When signed _____

189.

READ AGAIN G.O., No.
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DATED

CURRENT No.

ENCLOSURES TO C. No

ORDER OF GOVERNMENT A A A A A A A

LETTER OF GOVERNMENT.

STATEMENT WITH DITTO.

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IN ORIGINAL.

N.B.—

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