

7/15
Educational (1897) Department.

ORDINARY MS.

G.O., No. 262

Dated 5- 5- 97

INDEXED.

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W. 4
7/15

[Despatch Abstract.]

Sanctioning certain alterations in the
Syllabus for Practical Agriculture.

7/5/97

BACK PAPERS.

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

FURTHER PAPERS.

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

Educational (1897) Department.

CURRENT No. 441

Order mis.

The proposed alteration in the Syllabus is sanctioned.

No. 2530 Mis

Dated 5th April 1897

Received

Registered

Enclosures

Spare copies

SUBJECT.

Submitting to Government with the recommendation letter from the Director of Public Instruction regarding certain alterations in the syllabus for the Practical Agriculture.

The alterations in the syllabus may be approved

To the Secy. (R.S.) 440
D.P.D. 440-
C.G.E. 440

SECRETARY TO GOVERNMENT
7 APR 1897
LOCAL & MUNICIPAL

From the Board of Revenue
Revenue Settlement
Land Records and
Agriculture
Madras.

1/4
29/4/97

Has Rev. Dept. any remarks to offer on the proposal?
S.R. 27-4-97

Rev. Dept.

1/15/97

S.R. 27/5/97

best 2/5/97
C. 4/5/97
R. 5/5/97

BACK PAPERS.

G.O.	No.	Department.	Date.
	646	Edul	16-10-76 SC
	460	"	22-6-94 SC

FURTHER PAPERS.

G.O.	No.	Department.	Date.

AGRICULTURE.

5

ADVANCED EXAMINATION.

(i) PRACTICAL AGRICULTURE.

The history, objects, and scope of agriculture, and the conditions influencing its pursuit.

Division of the Madras Presidency into agricultural areas depending on rainfall, climate, &c.

The classification of soils. The ordinary soils met with in South India. Fertility and barrenness. The effects of rain, sun, air, &c., on the soil. The sub-soil.

The reclamation of waste land and the preparation of it for cultivation. Permanent improvements. Salt lands.

The methods, objects, and influence of tillage. The seed-bed. Fallowing.

Irrigation.

The conservation and application of manures.

Cropping, seeds and seed-sowing, weeding and after-cultivation.

The field-crops of Southern India, and their preparation for the market.

Pasture and fodder-crops.

Fruit and vegetable-growing in South India.

Sericulture.

The diseases and insect-pests of field and garden crops.

The breeding and management of farm-stock. The breeds of Southern India. Dairy-farming and dairy-produce.

Farm capital and labour. Stocking land. Disposal of produce. Conditions influencing the value of land.

(ii) AGRICULTURAL CHEMISTRY AND GEOLOGY.

[Geology shall be treated in an elementary manner with special reference to its application to agriculture].

Principal rock-forming minerals met with in Southern India. General characteristics of the rocks formed from them.

The origin and nature of soils and sub-soils. Soils produced from the different rock formations of Southern India.

Mechanical and chemical composition of soils.

The constituents of plants and animals. Plant-food and animal-food and their respective functions. The differences between the products of plants and animals.

Plant-food in the soil. Effects of cultivation on the soil. Retentive power of soils.

The seed. Germination. Nutrition and development of plants. Order in which plant constituents are assimilated and their ultimate destination. The effects of cropping on the soil. Composition of manures and principles of manuring. Valuation of manures.

The ordinary crops of Southern India and their preparation for the market. Green fodder, hay, straw, ensilage.

The process of animal nutrition. Composition and digestibility of foods. Capacity of food for producing heat and work. Albumenoid ratio. Requirements of young, adult, working, milking and fattening animals. Feeding rations and combinations of foods.

Relation of food to manure.

The chemistry of the dairy; milk, butter, ghee, cheese.

The examination shall comprise—

(1) A written examination.

Two papers, each of three hours' duration on practical agriculture.

One paper of three hours' duration on agricultural chemistry and geology.

(2) An oral and practical examination including—

(a) The use of implements in common use, and ploughing.

(b) The handling and management of livestock.

(c) Arable farming, with reference to—

(1) General practice;

(2) Agricultural excursions.

The distribution of marks and the minima required for passing shall be as follows:—

	Max.	Min. for passing.	
		1st class.	2nd class.
Written examination	40	...	...
Oral and practical examination { $\begin{matrix} a & 10 \\ b & 25 \\ c & 25 \end{matrix}$ }	60	40	30
Total	100	65	45

No candidate shall be admitted to this examination unless he shall have completed the full course of study in Chemistry (Inorganic and Organic), Botany, Agricultural Engineering, and Veterinary Science as prescribed for the Diploma in Agriculture, and shall have produced a certificate from a competent authority showing that he has—

- (1) ~~cultivated personally a plot of land during one season,~~
or managed a farm of ten acres or more for at least one year;
- (2) determined the proximate composition of an oil-cake. The candidate's original notes of analysis, authenticated by a competent authority, must be produced.

*during one season
taken part in the cultivation
of not less than two acres,*

9th October 1896.

No 660

To

The Director of Public Instruction,
Madras.

Sir,

I have the honour to address you regarding the question whether or not "plot cultivation" should be continued as a portion of the practical instruction of Class II. I am of opinion that it should not be continued but should be replaced by "field cultivation" which I shall refer to later on.

2. "Plot cultivation" has now had a fair trial. It was first introduced in the session 1891-92 and has been continued ever since. Each student of class II is given a small plot and on it he has to cultivate at least three crops (cereal, pulse and industrial). My objections to this system are as follows:-
First. The ^{system} question of agriculture pursued by the students is one which they would never put into practice in after life, assuming they took to farming for a livelihood. It may be taken for granted that students who come to this college will either farm a fairly large area, or if they are unable to do so, will look to some other means of earning money. There is not the slightest probability of even a small proportion of students trying to earn their living by cultivating, say $\frac{1}{2}$ an acre, by their own labour.

Second. The timetable for class II, has to be arranged so as to allow most of the morning hours usually occupied in practical instruction to be at the disposal of the students. Otherwise, the plots could never be cultivated. This arrangement is inconvenient and leads to the whole of the work of class II being incommoded for the purpose of allowing "plot cultivation" to be carried on.
Third. The educational value of "plot cultivation" is, as far as I can judge, very much exaggerated and is in my estimation less than that of "field cultivation", while it does not possess many of the latter's advantages.

3. I am aware that it sounds very well to hear that every student of the College has at one time of his ^{career} ~~career~~ cultivated a plot of ground without any help, and no doubt visitors coming to the farm in the mornings are much interested by seeing

1897

Dept.

Enclos. No. 2

To

C. No. 441

1/20/97
3

students working on their plots; but for the reasons given in paragraph 2, I am not inclined to recommend the retention of "plot cultivation" in the curriculum- I would prefer "field cultivation" By this I mean the cultivation of a big field with 3 or 4 kinds of crops all the labour being furnished by the students. An area of say 3 or 4 acres would enable implements to be used and its cultivation would be similar to that carried on on the Farm, and would resemble that likely to be carried on by students who take to farming. Further, as the whole class would work in batches according to notice put up on the previous or same day, the economy of time would be great. Of course it is intended that each student should take part in every operation.

4. I venture to hope that you ^{will} consider the matter and if you approve of the change, that you will be so good as to address Government with a view to the necessary alteration being made in the course of studies.

I have &c &c

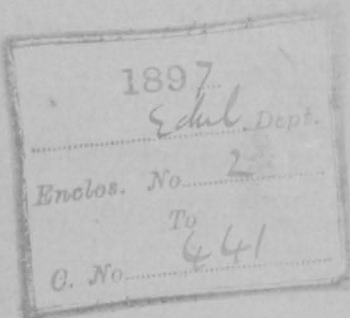
/Sd/ W. Keess,

Principal.

/True Copy/

D. Duncan

Director of Public Instruction.



OFFICE OF THE DIRECTOR OF

PUBLIC INSTRUCTION,

Madras, *9th March* 1897.

No. *2464*

From

THE HONOURABLE MR. D. DUNCAN, M.A., D. Sc., LL.D.,

DIRECTOR OF PUBLIC INSTRUCTION,

Madras,

To

The Secretary to Government,

Local & Municipal Department,

Fort St. George.

SIR,

I have the honour to submit for the sanction of Government a slight change in the course of studies in Practical Agriculture prescribed for the Government Advanced Technical Examination. Government is aware that the Principal, College of Agriculture, considered it disadvantageous to continue "plot cultivation" during the second year of the college course and was disposed to introduce "field cultivation" instead, vide paragraph 9 of the report on the College of Agriculture for the year 1895-96. In the enclosed copy of his letter, No. 660, dated, 9th October 1896, Mr. Keess has clearly explained his reasons for preferring the cultivation by a number of students co-operatively of a field of about three acres in extent, instead of the existing practice, according to which each student is entrusted with the cultivation of a plot of land on the college farm measuring 42 yds by 12, or 504 sq-yds, which represents about one-tenth of an acre. The Board of Revenue, whom I have consulted, sees no objection to the change being given a trial. I beg to submit herewith a copy of the Syllabus on Practical Agriculture with the alteration which the above proposal has rendered necessary.

I have the honour to be,

Sir,

Your most obedient servant,

D. Duncan

Director of Public Instruction

7/2012/57



Proceedings of the Board of Revenue

(Revenue Settlement, Land Records and Agriculture.)

Dated 5th April 1897.

No. 2550 Miscellaneous

READ the following letter from the Director of Public Instruction No 2465 dated 9th March/8.

I have the honour to inform you with reference to Board's Proceedings No. 603/Mis. dated 27th November 1896, that the size of each plot of ground heretofore assigned to each student for cultivation in the College of Agriculture has been ascertained to be 42 yards by 12 or 504 sq. yards.

2. They further to request that the Board will be good enough to submit to Government in the Educational Department the accompanying recommending a slight

1897
Edul. Dept.
Enclos. No. 1
To
C. No. 641

11/20/12/57

in the course of studies on practical
agriculture, which the proposed
substitution of "field" for "plot"
cultivation has rendered necessary.

Resolution

Submitted to Government with
the recommendation that the pro-
posed alteration ^{in the Syllabus} on Practical Agri-
culture may be sanctioned.

Copy and
(True extract)

R. J. Simonsen
Secretary

To The Secretary to Government,
Educational Department
with 3 papers in original

When given for copying 2
When copied 8
When examined 10
When signed 10

READ AGAIN G.O., No.
189

DATED

CURRENT No.

ENCLOSURES TO O. No.

ORDER OF GOVERNMENT

A A A A A A A

ORDER OF GOVERNMENT

STATEMENT WITH DITTO.

PAPERS NOT FILED UP, BEING MEANT FOR DESPATCH
IN ORIGINAL.

N.B.—

A = Copy in full.
B = Not to be copied.
P = Copy abstract only.
Q = Copy heading only.